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PRESIDENT'S ADDRESS*

GEORGE F. CLARKE, D.M.D.

MY FELLOW MEMBERS—

As we approach the start of a new year in the life of our Academy, it may be well to stop for a moment and review the progress we have made.

The American Academy of Dental Medicine was conceived and designed to work in a field of dentistry heretofore untouched by other dental organizations—to fulfill a special need for investigation and study into the problems of Dental Medicine. Our objectives, as set forth by the Constitution "To promote the study and dissemination of knowledge of the cause, prevention and control of diseases of the teeth, their supporting structures and adnexa and related subjects: and to foster and promote a better scientific understanding between the fields of dentistry and medicine." Our progress toward these objectives is proven in our growth, numerically, financially, professionally and culturally. It has been, I am sure, far beyond the fondest dreams of those who worked so hard and well to make this Academy a vital part of our professional lives.

While we have done much toward the realization of our objectives, there will always be much more to do. With the ever expanding horizons in the prevention and control of disease, we must work hard and make even more progress in our chosen field.

In the problem of Dento-Medical Relations we have a great opportunity to be of service to both professions. While greater co-operation has been accepted as a desirable aim, little has actually been done about it. Many men have put much thought and effort in trying to solve this problem. Dr. John Kolmer has been a pioneer in teaching and establishing this precept at the college level, and Dr. Albert Midgley in putting it into practice in the Rhode Island Plan. Others have worked equally hard. But these splendid efforts have not prospered as much as they should, because they were largely individual efforts, and did not receive the support that they deserved from either profession. Under the sponsorship of the Academy, with the united efforts of the whole membership, much can be done to make Dento-Medico co-operation a reality. We must make this effort. We are pledged to do so, for it is one of the basic objectives for which the Academy was founded. We call upon the medical profession for many of our essayists and clinicians,

* Presented before the Eighth Annual Meeting of the American Academy of Dental Medicine, Philadelphia, Pa., May 14-16, 1954.

and several of them are members of our Academy. The American Academy of Dental Medicine has closer contacts with the medical profession, in a field of common interest, than any other group in Dentistry. So we are in a position to make this cooperation a major project, with assurance of eventual success. The American Academy of Dental Medicine should lead the way.

With the path of progress well charted by the hard work of previous administrations, and with real effort and co-operation of the entire membership, we can hope for a fruitful year in the affairs of the Academy. Your officers are pledged, with your help, to our continuing success.

RETIRING PRESIDENT'S REPORT*

ALVIN H. BERMAN, D.D.S.‡

Another year—the eighth—in the life of the American Academy of Dental Medicine now draws to a close. It is proper and fitting that we pause and review our past history and our present state.

The progress made up to this point is not the result of the work of any one man nor during any one term. Nor can it be traced to the spontaneous awakening of people to the value of dental medicine as a basic concept of general health. On the contrary, the enviable and ever-growing esteem and position now held by the Academy was brought about by the ideals of its founders; their painstaking scientific and clinical investigations and findings; their many contributions to medical and dental literature; and the gradual increase in the acceptance of their efforts in the field of dental medicine. Together, they add up to a solid, substantial organization, composed of outstanding men and women; and dedicated to the deep and serious study of the causes of dental diseases and their relation to general diseases.

We are proud to report that the past year has added to our record of continued progress. Let us review some of these accomplishments.

Membership. Since membership in the Academy as stated in our Constitution, is by invitation, our numerical growth must necessarily be slow since we attract only those

* Presented before the Eighth Annual Meeting of the American Academy of Dental Medicine, Philadelphia, Pa., May 14-16, 1954.
‡ Deceased, May 17, 1954.

men and women who are more especially interested in dental medicine. The Academy roster now totals 611 to which may be added 32 new names which the Membership Committee lists for your consideration at this meeting.

Journal. It has been properly stated that the Journal of Dental Medicine, the official publication of the Academy, is one of the most important and far-reaching facets of the Academy activities. Not only is it the printed voice of the Academy but it is, by far, the finest publicity and "good-will ambassador" we possess. Two additional and outstanding features were added this year, i.e., the extra issue on nutrition by Dr. Harry Roth and the newly added summaries of each article in Interlingua. This is a new experience in dental literature and our Editor and his Staff may well be proud of this outstanding piece of work.

Finances. The report of the Treasurer will reveal a good working capital and a healthy financial reserve. It is nothing short of amazing that an organization as young as ours is in such excellent financial condition.

Constitution. In any growing organization there is constant need for re-evaluating its parliamentary and procedural needs and for revising its statutes. Presented for your consideration and action at this meeting are some recommendations for constitutional changes which bear the approval of the Constitution Committee and which are intended to further provide a better clarification of our governing laws and a smoother operation of our facilities.

Sections. As a result of an earnest and concentrated effort on the part of the Chairman of the Committee on Sections, we are happy to report that a new Section—the Michigan Section—has been chartered and is now functioning as a subordinate group of the Academy. This new body of fine men and women are enthusiastic about the work being done in the field of dental medicine and they give promise of becoming one of the more prominent and active Sections in the Academy. Reports also indicate that the organization of additional Sections are now being planned and should be consumated in the near future.

Specialty Board. With regard to our application for the establishment of a Specialty Board in Dental Medicine, advice has been received from the Council on Dental Education that no new Specialty Board will be approved until the Council has had the opportunity to re-study the entire problem of dental specialties. For the time being, our application failed to receive the approval of the Council. Our Academy will continue to pursue this matter and hope, at a later time, to report full success in this venture.

Graduate Awards. With the addition, this year, of more than 80 recipients of the Academy Graduate Awards, over 500 such certificates have been distributed to Senior students in medical and dental schools throughout the World. Since these awards are presented on the basis of proficiency and interest in Dental Medicine, we should make every effort to maintain contact with these young men and invite them to active membership in the Academy when they have become constitutionally eligible.

Research. We are pleased to officially report for the first time that the Academy is the recipient of a voluntary contribution of $1,000.00 for Research. This sum of money was made available to the Academy Research Fund by Mr. Charles Shapiro of Brooklyn,

N. Y., through the efforts of our member Dr. Julius Horn of New York City. This gift from a non-member of the Academy is a new experience for us and clearly indicates the potentialities of our Academy as a fine medium for Research.

Meetings. The Mid-Winter meeting in New York City was a huge success. The attendance—more than 200—was the largest in our history and the program was outstanding. The Annual Meeting, which we are now attending, was carefully planned and the Committee, headed by Doctors S. Leonard Rosenthal and George G. Stewart, have done an excellent job in providing interesting scientific sessions and enjoyable social events.

Committees. It is gratifying to report that all Committees are functioning well. The various Chairmen have shown a keen interest in the work of the Academy and have contributed much to the smoothness of operation which has been our experience during the past year. As the Reports of the various Chairmen are presented to you, you will better understand the great amount of effort which has been put forth and you will better appreciate the results obtained therefrom.

Visitations. Your President visited Sections in Montreal, Newark, N. J., Philadelphia, Baltimore and attended a special opening meeting of the newly chartered Section in Detroit, Michigan, at which time the Charter for the Michigan Section was presented. Plans had been completed for visits to Boston and New York City but an unfortunate and confining illness necessitated the cancellation of these trips.

Following an over-all view of the machinery through which the Academy functions, the following recommendations are offered for your consideration:

1. Plans should be devised to enliven a greater interest in the Research and Endowment Fund to the end that the Fund be sufficiently enlarged and put to use for some worthwhile research project.
2. A budgetary allowance should be provided for reimbursing the traveling expenses of a member who accepts an invitation to present a paper and/or a clinic to an organized Section.
3. Enlargement of our Mid-Winter meeting by devoting the entire day of Sunday to scientific sessions and planning the Board of Trustees Meeting and the general meeting of the Academy on the preceding afternoon and evening, respectively.
4. A closer relationship between the national body and the Sections should be maintained. In our present setup there is little or no contact between the national body and the Sections. A mimeographed Bulletin, issued at stated intervals, by the national body and, more particularly, the National Secretary, would bring about a mutually appreciated cooperation between the Sections and the national body.

This report could not be complete without an expression of my deep appreciation to the Academy and to its members for the privilege of serving as your President during the year which has just come to a close. The spirit of helpful advice and unselfish assistance which has come to me from the Founders, the National Officers, the Committee Chairmen and the membership at large has been a tower of strength and encouragement to me. Finally, the large number of personal friendships which I have made with so many Academy members will be the greatest reward for my efforts. I shall always cherish them.

DIAGNOSIS AND TREATMENT PLANNING IN PERIODONTICS*

SAMUEL CHARLES MILLER, D.D.S., F.A.C.D., F.A.D.M.†

Periodontia is so closely interrelated with all phases of dental practice that it is right at home in a combined discussion of this type. Claude Bernard stated "Systems do not exist in nature. They are made by the minds of men." Thus the subdivision into the various specialties in the field of Dentistry as well as in other learned sciences is only for convenience of training, presentation, and execution of procedures rather than a system based on biologic requirements. The periodontist must consider the patient in his entirety for the evaluation of the total picture. Because the dentist cannot perform complete physical examinations, he must rely on more detailed and exacting clinical history to guide him toward the discovery of related systemic etiologic factors. For this purpose, the New York University Dental-Medical Questionnaire was devised.[1] (Fig. 2). This chart has been given ample trial in both specialty and general practice. It also has been successful in the hands of undergraduate students. In a study by Miller, Blass, Witkin, Stahl, Koteen and D'Onofrio, it was found that more information could be obtained in this manner than by formal questioning.[2]

It is generally accepted that the etiology of periodontal disease does not depend on any single factor. A combination of a number of dysfunctional, irrational and systemic factors in various combinations are usually present.[3, 4] None of these factors alone (Fig. 1) produces the disease. However, by their proper combination, abnormal clinical changes, either acute or chronic depending on the type and severity of the factors, are produced (Fig. 3).

FIG. 1

ETIOLOGIC CHART OF PERIODONTAL DISEASE

Dysfunctional

1. Overfunction
   a. Excessive stress on teeth
   b. Insufficient periodontal support
   c. Too powerful masticatory musculature
2. Underfunction
   a. Premature wear (natural or artificially produced)
   b. Nonocclusion
   c. Indolent mastication
3. Abnormal habits
   a. Unilateral mastication
   b. Abnormal biting habits
   c. Clenching
   d. Bruxism and bruxomania

Irritational

1. Abnormal anatomy
   a. Tooth form
   b. Tooth position
2. Deposits on teeth
3. Nondetergent diet
4. Food impaction
   a. Vertical
   b. Horizontal
5. Mechanical irritants
   Cavity margins, improper inlay or filling margins; bridges, orthodontic appliances, clasps, or dentures which impinge upon or irritate the gingivae.
6. Chemical irritants
7. Atmospheric irritants (mouthbreathing)
8. Improper toothbrushing
9. Improper orthodontic procedure

Systemic

1. Faulty nutrition
   a. Acid-base disbalance
   b. Vitamin deficiency
   c. Mineral deficiency
2. Debilitating disease
3. Blood dyscrasias
4. Endocrine dysfunction
5. Pregnancy
6. Allergies and drug poisonings
7. Metallic poisonings
8. Roentgen, radium, and atomic radiation
9. Psychogenic factors

* Presented as part of a Symposium on Diagnosis at the annual meeting of the American Academy of Dental Medicine, Philadelphia, May 16, 1954.

† Professor of Periodontia and Chairman of Periodontia Department, New York University College of Dentistry.

FIGURE 2—SELECTED QUESTIONS FROM

NEW YORK UNIVERSITY COLLEGE OF DENTISTRY

DEPARTMENT OF PERIODONTIA

DENTAL-MEDICAL HISTORY

For Men:

Name: (please print) ..... Date: .....

Address: .....

Telephone: .....

Referred by: .....

Family Physician's Name: .....

Address .....

Telephone: .....

Date of Last Physical Examination: .....

Your Physician's Findings: .....

What Is Your Present Dental Complaint? .....

Please Circle Appropriate Answer to Each Question.

A

1.	Are you under a physician's care at present?	Yes	No
2.	Do you take any medicine at present?	Yes	No
3.	Have you ever had anemia (thin blood)?	Yes	No
4.	Were you ever treated for venereal disease (bad blood)?	Yes	No
5.	Do you have diabetes (sugar disease)?	Yes	No

B

19.	Do you have frequent fever blisters on your lips or mouth?	Yes	No
20.	Do you have frequent canker sores in your mouth?	Yes	No
21.	Did you ever have burning of the tongue or mouth?	Yes	No
22.	Do the corners of your mouth become cracked?	Yes	No
23.	Do you often have excessively dry mouth?	Yes	No

C

53.	Do you suffer from a running nose?	Yes	No
54.	Are you troubled with frequent or severe sneezing spells?	Yes	No
55.	Is your nose continually stuffed up?	Yes	No
56.	Do you breath through your nose?	Yes	No
57.	Have you had frequent or severe nosebleeds?	Yes	No

D

61.	Do you need glasses for any reason?	Yes	No
62.	Do your eyes usually blink or water?	Yes	No
63.	Are your eyes often red or inflamed?	Yes	No
64.	Do you often see spots before your eyes?	Yes	No
65.	Do you ever have severe pains in or behind your eyes?	Yes	No

FIGURE 2 — *Continued*

E

68. Are you hard of hearing? Yes No
69. Have you had frequent severe earaches? Yes No
70. Do you suffer from sinus trouble? Yes No
71. Have you ever had a running ear? Yes No
72. Do you hear constant buzzing in your ears? Yes No

G

86. Do you often have heavy chest colds? Yes No
87. Do you catch more than three severe colds a year? Yes No
88. Whenever you catch a cold do you always go to bed? Yes No
89. Did you ever live with anyone who had tuberculosis? Yes No
90. Have you ever had tuberculosis? Yes No

H

100. Is your appetite good? Yes No
101. Do you often have nausea or upset stomach? Yes No
102. Do you often have indigestion? Yes No
103. Do you frequently eat sweets or other foods between meals? Yes No
104. Do you belch a lot after eating? Yes No

I

120. During the day, do you usually have to urinate frequently? Yes No
121. Do you have to get up at night to urinate? Yes No
122. Do you ever have severe burning pain when you urinate? Yes No
123. Have you ever noticed blood in your urine? Yes No
124. Do you sometimes lose control of your bladder? Yes No

J

127. Have you ever had a discharge from your genitals? Yes No
128. Are your genitals often painful or sore? Yes No
129. Have you ever had anything wrong with your genitals? Yes No
130. Have you ever received treatment for any genital trouble? Yes No

K

131. Do you have frequent severe headaches? Yes No
132. Do you often feel miserable from pressure or pain in your head? Yes No
133. Are you aware of numbness or tingling in any part of your body? Yes No
134. Do you frequently feel faint? Yes No
135. Have you fainted more than twice in your life? Yes No

L

140. Is your skin unusually sensitive or tender? Yes No
141. Are you subject to frequent boils? Yes No
142. Does your skin often break out in a rash? Yes No
143. Are you often bothered by severe itching? Yes No
144. Do you sweat a great deal even in cold weather? Yes No

M

150. Do your muscles and joints often feel stiff? Yes No
151. Do you often have severe pains in your arms or legs? Yes No
152. Have your joints ever been painfully swollen? Yes No
153. Do you have severe pains in your back? Yes No
154. Do you suffer from weak or painful feet? Yes No

FIGURE 2 — *Continued*

N

157. Are you definitely overweight? Yes No
158. Are you definitely underweight? Yes No
159. Has there been any recent change in your weight? Yes No
160. Are you thirsty a good deal of the time and do you drink a lot of liquids? Yes No
161. Have you ever had a serious operation? Yes No

O

164. Have you any birthmarks warts or moles? Yes No
165. As far as you know, has there been any change in their size or color? Yes No
166. Have you any lumps or thickening anywhere on your body? Yes No
167. Have you any swollen glands in any part of your body? Yes No
168. Have you any irregular bleeding or unusual discharge from any of the natural body openings? Yes No

P

169. Do you usually take one or more alcoholic drinks a day? Yes No
170. Do you drink more than six cups of coffee or tea a day? Yes No
171. Do you smoke more than 20 cigarettes a day? Yes No
172. Do you eat at regular times daily? Yes No
173. Do you frequently eat when you are overtired? Yes No

Q

176. Do you often break out in a cold sweat? Yes No
177. Do you often become suddenly scared for no apparent reason? Yes No
178. Do strange people or places frighten you? Yes No
179. Do you usually get directions and orders wrong? Yes No
180. Do you make frequent mistakes when you do things quickly? Yes No
216. Are you extremely shy or sensitive? Yes No
217. Are your feelings easily hurt? Yes No
218. Does criticism usually upset you? Yes No
219. Do people usually misunderstand you? Yes No

Are there any additional comments you would like to make?

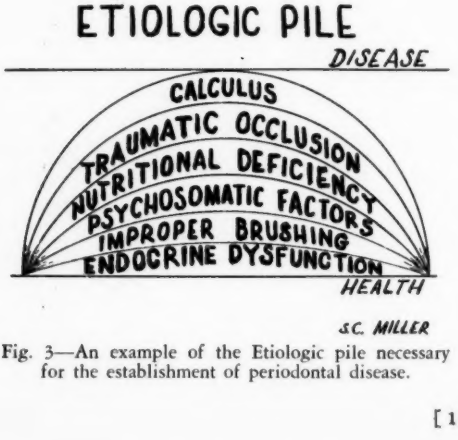

Fig. 3—An example of the Etiologic pile necessary for the establishment of periodontal disease.

In the past so much attention had been given to bacteria and other micro-organisms that the issue of etiology had been clouded to the point that diagnosis consisted almost wholly of a search for the microscopic agent thought to be responsible for the disease. It is now known that even in so-called Vincent's infection the cause is not the bacteria. These are present *because* of the disease rather than as the *cause* of it. In acute necrotizing ulcerative gingivitis, which is the proper name for the condition previously known as Vincent's infection, the cause is a combination of some of the following:[3]

Local

1. Erupting teeth
2. Poor oral sanitation
3. Irritating influences
   a. Excessive smoking
   b. Calculus
   c. Overhanging margins
   d. Traumatic occlusion

Systemic

1. Physical exhaustion
2. Emotional strain
3. Nutritional deficiency
4. Any general metabolic disturbance lowering tissue resistance.

Much time also has been spent in the past in classification. When one realizes that either hyperplasia or recession may be produced by essentially identical causes simply by a change in milieu, the futility of classification as a guide to treatment becomes apparent. Diagnosis can serve its purpose best by uncovering the cause of the disease. It is essential not to mask the disease by treating symptoms, not to temporarily suppress the disease by taking away the bodily defenses such as is done by the use of adrenal or pituitary products, but to definitely *cure* the disease by eradicating the cause.

57 West 57th Street, New York 19, N. Y.

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DIAGNOSE E PLANIFICATION THERAPEUTIC IN PERIODONTIA

Dr. chir. dent. Samuel Charles Miller (F.A.C.D., F.A.D.M.)

SUMMARIO IN INTERLINGUA

Claude Bernard ha dicite, "Systemas non existe in le natura; illos es facite in le mente del homines." Le subdivision del campo del dentisteria in varie specialitates (exactemente como le subdivision de altere disciplinas scientific) offere avantages de instruction, presentation, e execution practic sed non es un systema basate super requirimentos biologic.

Proque le subdivision periodontic es intimemente connectite con omne phases del practica dental, le periodontista debe considerar le patiente in su totalitate. Ille debe evalutar le situation total.

Proque le dentista non pote executar un complete examine physic, ille depende del disponibilitate de detaliate e exacte historias clinic que pote servir de guida in le discoperta—in le systema general—de factores etiologic affin. Pro iste objectivo le Questionario Medico-Dental del Universitate New York esseva elaborate. (Vide fig. 2.) Illo ha essite probate amplemente per specialistas e practicos general. Illo ha etiam essite utile inter le manos de studentes elementari. In un studio per Miller, Witkin, Blass, Stahl, Koteen, e D'Onofrio le facto esseva establite que le questionario permitte le accumulation de plus information que interrogatorios formal.

On es de accordo in general que le etiologia de morbos periodontal non depende de un sol factor. In le majoritate del casos on ha a facer con un serie de factores dysfunctional, irritational, e general in varie combinationes.

Le factores in le sequente tabula es responsabile pro le morbo. In varie combinationes illos produce cambiamentos clinic anormal que es acute o chronic dependente del typo e del severitate del factores involvite.

TABULA ETIOLOGIC DE MORBO PERIODONTAL

Factores Dysfunctional

1. Hyperfunctionamento
   a. Effortic excessive super le dentes
   b. Insufficientia del supporto periodontal
   c. Fortia excessive del musculos masticatori
2. Hypofunctionamento
   a. Abrasion prematur (de origine natural o artificial)
   b. Non-occlusion
   c. Mastication indolente
3. Habitudes anormal
   a. Mastication unilateral
   b. Habitudes de morsura anormal
   c. Contraction del maxillas
   d. Bruxismo e bruxomania

Factores Irritational

1. Anatomia anormal
   a. Forma dental
   b. Position dental
2. Depositos super le dentes
3. Dieta non-detergente
4. Impacto masticatori
   a. Vertical
   b. Horizontal
5. Irritantes mechanic: Margines de cavitates, imperfecte margines de restaurationes; pontes, installationes orthodontic, agrafes, o dentaturas artificial que impinge super le gingivas o irrita los
6. Irritantes chimic
7. Irritantes atmospheric (respiration buccal)
8. Incorrecte brossage dental
9. Incorrecte technica orthodontic

Factores del Systema General

1. Faltas de alimentation
   a. Disequilibrio de acidos e bases
   b. Deficientia de vitaminas
   c. Deficientia de minerales
2. Morbo debilitante
3. Dyscrasias del sanguine
4. Dysfunctionamento endocrin
5. Pregnantia
6. Allergias e toxication a drogas
7. Toxication metallic
8. Irradiation (roentgen, radium, atomic)
9. Factores psychosomatic

ORAL CANCEROPHOBIA
ITS REDUCTION THROUGH KNOWLEDGE

LOUIS R. BURMAN, D.D.S., F.A.D.M., F.A.C.D.*

The lay and scientific literature have been deluged with a mass of writings that have made the public increasingly aware of the great scourge, cancer. The public has been advised about routine detection examinations and have been apprised of the fact that lingering sores, pains, ailments, etc., should be carefully investigated. Detection tests of many types have been developed which are in constant use.

The great amount of publicity given to this affliction has no doubt aided the dental and medical professions in early discovery of the condition, when present in a patient, because of the increasing number of examinations. The practitioners have been able, in many instances, to effect cures because of early detection, and in the field of prevention yoeman work has been done.

Because of the interest created regarding this disease, the public has become cancer-conscious, cancer-conscious to the extent that they now look at their bodies in a different light. Self examination has become a common practice with the intelligent individual. Pimples, cuts, bumps, scratches, etc., are watched very carefully. Because of this sort of constant and severe self examination, people are beginning to find out many things about their physical make-up that were never before apparent to them. Although this is a splendid education for the layman, it has also led to much confusion and worry amongst those persons who were and are not aware of the normal surface findings of the body. Therein lies one of the big headaches regarding many unnecessary fears pertaining to cancer.

Fig. 1—Nodulated upper labial frenum and on the lower jaw the line of demarcation between the alveolar and areolar mucosa.

Fig. 2—Cheek impingement line.

Numerous articles have appeared relating to the findings in cancer, giving all the details of

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diagnosis, severity and prognosis of the disease, but little if any thought has been given to the education of the public concerning the normal findings of surface anatomy. Many alterations and variations of the normal, of a non-pathologic nature exist, which if known to the public might reduce this cancerophobia.

It is not intended that these thoughts be interpreted as a psychosomatic approach to the treatment of cancerophobia. This is not a psychosomatic problem but one of education, for the psyche is not involved until the problem has assumed abnormal proportions. The early recognition and understanding by the patient that there is no problem will prevent the thought stresses leading to mental distress.

All too frequently a patient has presented himself for examination of a suspected abnormality, upset, worried, cancer-conscious and a ripe case for the psychiatrist, only to find that he has been unduly aggravating himself about a normal condition. It is not enough in cases of this type to tell the patient that there is nothing about which to worry. They must be made to understand the situation with proper explanation, with a transfer of confidence from the practitioner.

These explanations with confidence can only be made if the practitioner himself is aware of the normal findings. We should review our knowledge of structures to be found in the average individual together with the many variations of normal anatomy that may be seen. It is the purpose of this paper to describe some of the common oral findings about which patients inquire.

Fig. 3—Opening of Stenson's Duct, duct opening painted with dye, projection of tissue in normal position.

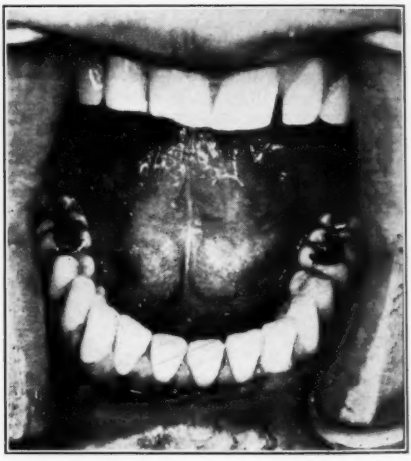

Fig. 4—Sublingual papilla (Wharton's duct openings), sublingual fold, lingual frenum.

Education of the patient or public may be done through the literature. This is a difficult task, for the lay press is interested only in spectacular material. It is also difficult to educate the public through the professional press for it is expensive and distribution of printed matter of this kind is not easy. It therefore falls to the practicing dentist and physician to present this material and information to his patients whenever the opportunity can be created.

LIPS

Frenum. The upper labial frenum is almost universally present. In a great percentage of persons, there is a small nodule or extension of tissue which seems to be suspended by a ped-

uncle from the frenum. The nodule or extension is covered by smooth unbroken epithelium and the entire structure when seen as described is a normal one (Fig. 1).

CHEEKS

Cheek Impingement Line. When the mouth is at rest with the teeth apart, each cheek impinges upon the open space. The pressure of the cheek forcing the membrane into the space causes a folding of the tissue at this area. The double fold of mucous membrane may show up as an opaque line running from the angle of the mouth back to the second or third molar area (Fig. 2).

Opening of Stenson's Duct. The duct of the parotid gland opens on the inside of the cheek at an area adjacent to the upper first or second molar. The opening is usually housed by a single papilla. In some instances there is a multiple papilla present and in these cases the duct opens at the most anterior part of this wattle. The papilla when present is well defined and hangs from the cheek covered by an apron of mucous membrane. In covering this papilla, this apron sometimes presents an opaque appearance at the edge of the papilla as the mucous membrane doubles over to return to the cheek. The opening of the duct is high up on the tooth side of the papilla (Fig. 3).

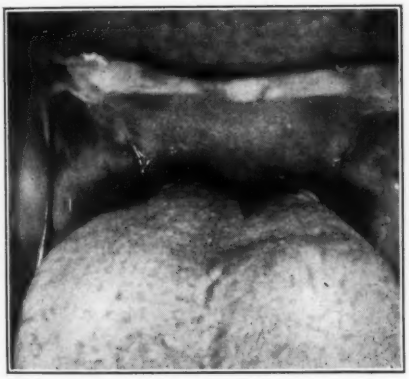

Fig. 5—Tongue, circumvallate papillae.

TONGUE AND FLOOR OF MOUTH

Opening of Wharton's Duct. The duct of the submaxillary gland opens at the base of the lingual frenum where it is attached to the floor of the mouth. The openings lie in an elevated mass of tissue called the sublingual papilla. This papilla varies in size and may be quite large. The structure is bilateral but may appear as a single large papilla with two openings (Fig. 4).

Sublingual Fold. This is apparent when the tongue is raised. It covers the sublingual gland. On the summit of this fold may be seen the openings of the ducts from this gland (Fig. 4).

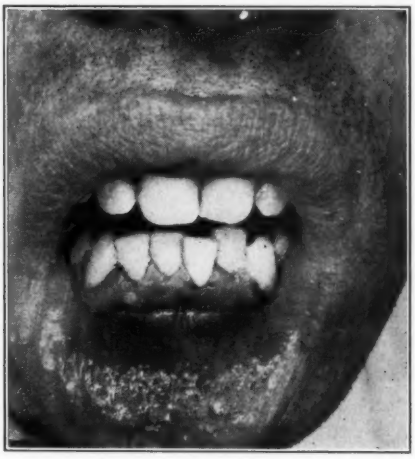

Fig. 6—Epithelial nodule, lower labial frenum.

Circumvallate Papillae. Far back on the dorsum of the tongue, in front of the V shaped sulcus terminalis are eight to twelve large, rounded eminences known as the circumvallate papallae. These are arranged in a V shaped pattern and are rich in taste receptors. When the tongue is extruded, these may be elevated at the base of the tongue (Fig. 5).

GINGIVAE

Pigmentation. This may be found in many individuals, especially those with dark skin.

This is the same type of pigmentation as is found in other parts of the body. The area may be small or widespread.

Epithelial Nodule. The type described here is one which does not alter in size and presents a smooth unbroken surface. It is usually found on the gingivae when it is present and it may be on either jaw. Its surface is made up of normal epithelial cells covering some connective tissue. The reason for its presence is not known. Some investigators feel that it may be the remnant of a previous fistulous tract and some feel that it may be due to traumatic occlusion. At any rate, the nodule, when seen without etiology, persists without growth and has no pathological significance (Fig. 6).

Fig. 7—Bony exostosis on lower jaw, torus maxallaris on upper jaw.

Line of Demarcation Between Alveolar and Areolar Mucosa. There is a sharp change in color where the hornified alveolar mucosa continues as the non-hornified areolar mucosa beyond the alveolar bone. This change in color is caused by the blood vessels showing through the thinner layer of epithelium giving the areolar mucosa a reddish appearance in contrast to the light pink of the alveolar area. This contrast is best seen on the labial surface of the lower jaw. It is generally never seen on the palatal areas and is only occasionally present on the maxilla (Fig. 1).

MANDIBLE

Bony Exostosis. This may be seen on the labial surface of the lower jaw, usually in front of the alveolar bone of the incisor teeth. This is usually a bony structure similar in nature to the bone of the area of the mandible at which it is found. The size varies, but when seen, does not increase in size. Some authors state that this is due to traumatic occlusion but the condition is frequently seen in mouths without trauma (Fig. 7).

Torus Mandibularis. This is a projection of the bone of the inner surface of the mandible, ordinarily seen at the cuspid or bicuspid region. The projection may be the size of a pin head or as large as a kidney bean or it may be lobulated. In the adult it does not increase in size (Fig. 8).

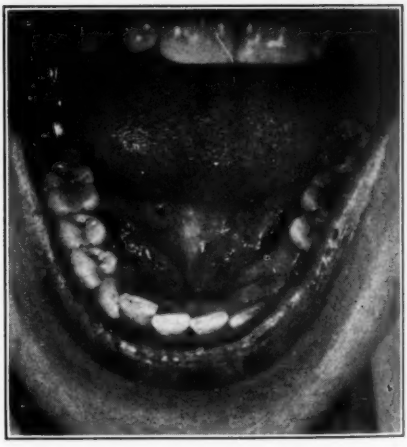

Fig. 8—Torus mandibularis.

MAXILLA

Torus Maxillaris. These are small bony exostoses seen on the labial surface of the upper jaw. They may be isolated or multiple. They are palpable and present a whitish appearance under the mucosa due to the stretching of the mucosa as it covers these projections (Fig. 7).

Torus Palatinus. On the posterior part of the hard palate in the mid-line, not necessarily bilaterally symmetrical, may be seen a bony projection of variable size. This has been seen large enough to almost touch the tongue when the mouth is at rest. The mucous membrane covering is smooth and continuous. The torus may be quite small and frequently is absent (Fig. 9).

Fig. 9—Torus palatinus, rugae, incisive papilla.

Incisive Papilla. A pad of tissue is present on the anterior part of the hard palate in the mid-line between the two central incisors. This pad covers the openings of the incisive foraminae. It varies in size (Fig. 9).

Palatal Rugae. These are folds of tissue running postero-laterally from the mid-line at the anterior part of the hard palate (Fig. 9).

SOFT PALATE

Uvula. In the mid-line, suspended from the free margin of the soft palate, there is usually a conical shaped projection of soft tissue. This varies in size, may be absent or bifid. When covered with smooth unbroken epithelium it is a normal finding for the individual (Fig. 10).

The above mentioned structures need not necessarily be found in all mouths. They may all be absent or a number of these structures may be found in any one mouth.

It is interesting to note that all of these structures are seen in children as well as in adults. Under observation from childhood, one may see one or more of these structures increase in size, especially the bony variety. It should be remembered that this increase in size is a normal one and keeps pace with the growth of the jaws.

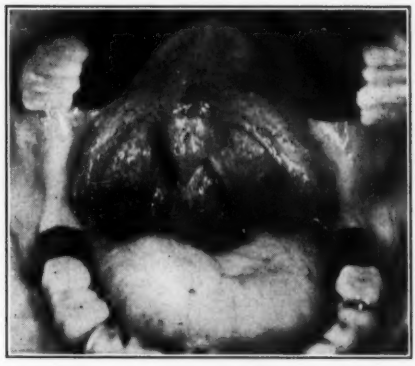

Fig. 10—Soft palate, uvula.

The realization that these conditions are normal findings for the individual in whom they are found, and a knowledge of what and where these structures are, will aid the practitioner in his explanations to the patient. His confidence will radiate to the patient and allay the fears the patient may have. When the practitioner is confronted with an individual who is disturbed by these types of normalities, he can do his share towards reducing the cancerophobia by explanation and assurance, and thus perform a beneficial health service.

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CANCEROPHOBIA ORAL SU REDUCTION PER INFORMATION PUBLIC

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SUMMARIO IN INTERLINGUA

Le litteratura laic e scientific es inundate de scriptos que rende le publico de plus in plus conscie del grande flagello: cancere. Le publico ha information in re le routine del examines detectori e comprende le necessitate de investigar cautemente lesiones resistente, penas, debilitates, etc. Essayos detectori de multe typos es disponibile e se trova in uso constante.

A causa del extense interesse in iste morbo le publico ha devenite "conscie de cancere" . . . "conscie de cancere" usque al puncto que le corpore human es reguardate ab un nove puncto de vista. Le individuo intelligente ha disveloppate le habitude de examinar su corpore criticamente. Pustulas, tumescentias, grattamentos, etc. es surveliate attentivissimemente. A causa de iste sever e constante examine de lor corpore e su partes, le gente comencia a apprender factos physiologic que usque nunc illes ignorava completemente. Ben que isto es un excellente education pro le laico, le situation ha etiam generate multe confusion e anxie apprehensiones del parte de individuos qui non es familiar con lo que pote normalmente occurrer al superficie del corpore human. Isto es un del major causas de multe non-justificate timor relative a cancere.

Numerose articulos ha apparite in re le symptomas characteristic de cancere. Illos ha detaliate omne aspectos del diagnose e prognose del morbo.. Sed usque nunc nulle o pauc attention ha essite prestate al problema de informar le publico in re le anatomic aspectos normal del superficie del corpore. Il existe numerose non-pathologic modifications e variationes del stato normal, e le cancerophobia del publico subsiderea sin dubita si illos esseva generalmente cognoscite.

Le education del patiente e del publico pote effectuar se per medio del pressa. Sed isto es un difficile procedimento proque le pressa es super toto interessate in materias sensational. Le education del publico per medio del publicationes professional es etiam difficile, proque tal publicationes es car e lor distribution non es facile. Ergo il deveni le deber del dentista e del medico practic de presentar iste datos e iste information a lor patientes quandocunque un opportunitate a facer lo pote esser create.

Nimis frequentemente patientes qui ha detegite un symptoma que illes considera como un anormalitate se presenta al examine in un stato de anxietate, de timor, e de cancerophobia que les rende preste pro le cura del psychiatro, e tunc illes debe discoperir que lor integre excitation es causate per un condition totalmente normal. In tal casos il non suffice assecurar le patiente que su timor es sin base. Ille debe reciper un explication del factos. Ille debe comprender le situation, e le confidentia del practico debe transferer se a ille.

Le structuras mentionate in iste articulo non es necessarimente trovabile in omne buccas. Illos omnes pote mancar, e varie buccas pote exhibir varie combinationes de illos.

Il es interessante notar que omne le structuras mentionate in le articulo occurre in buccas infantil e adulte. In patientes surveliate ab lor prime infantia on pote observar un o plure tal structuras in lor lente crescentia. Isto es specialmente ver in le caso del varietate ossee. On debe comprender que iste augmento de magnitude es un processo normal que accompania le crescentia del maxilla.

Le comprension que tal symptomas es tractos normal del individuo in qui illos es observate e, in plus, le cognoscentia del natura de tal structuras e del sitos in que illos occurre va adjutar le practico a explicar le situation al patiente. Su confidentia va irradiar le patiente e alleviar le anxietates que ille suffre. Quando le practico se trova confrontate con un individuo disturbate per iste genere de *normalitates,* ille pote contribuer al reduction del cancerophobia public per explicar le factos e per calmar le patiente. Assi ille rende un benefic servicio al causa del sanitate public.

SOME OCCULT SOURCES OF ORAL SEPSIS*

HAROLD K. BOX, D.D.S., Ph.D., F.D.S.R.C.S. (Eng.)†

In 1900, William Hunter[1] defined oral sepsis as "sepsis arising in connection with diseased conditions of the mouth," and he regarded it as an "important and prevalent source of disease." In 1914, Coyler[2] pointed out that the term 'oral sepsis' is "merely a convenient term for including all chronic forms of sepsis about the mouth."

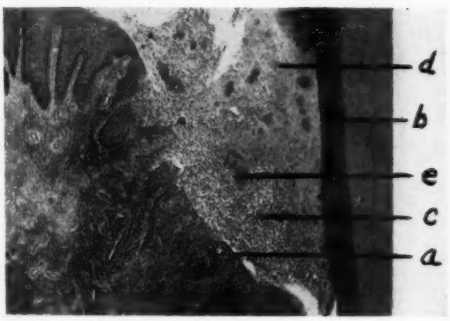

Fig. 1—Periodontal pocket with its contents in place.

a. epithelial lining of soft-tissue wall of pocket
b. cementum surface
c. cellular debris
d. homogeneous material teeming with micro-organisms
e. complex organism-formation similar to that described by Beust, Aisenberg and other workers

Common sources of oral sepsis are usually understood to include gingival and periodontal diseases, suppurative and gangrenous dental pulps, periapical abscesses, and necrotic root fragments. To these sources, also should be added the 'furred tongue' and the infected lingual tonsil.[3] The gingival tissues in contact with faulty filling margins, and tissues in defective pontic-mucosa contacts and improper clasp-gingival relations, also provide examples of local factors that are frequently overlooked. With these may be included malposed teeth which so frequently are involved in the production of local septic conditions. (Fig. 1, Fig. 2.)

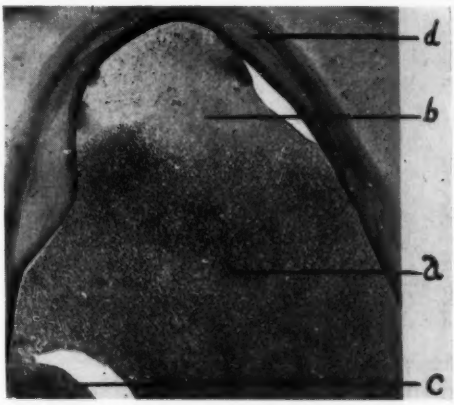

Fig. 2—Involvement of trifurcation of upper molar, with inflammatory cellular invasion and debris.

a. large mass of inflammatory cells
b. debris
c. epithelial strand
d. cementum

The factor most commonly overlooked as a source of oral sepsis is 'habitual uncleanliness,' as manifested by the accumulation of cellular and food debris, and microorganisms, along the gingival margins. As Fones (1925)[4] has pointed out, the gingival tissues cannot remain in a state of high resistance in a mouth which is continually unclean. Collections of debris in the region of the gingival margins, and particularly when deposits of calculus have developed, are probably the main local factor in

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the establishment of gingivitis. It is well to remember this tenet of Black (1886),[5] viz. "no tissue retains its health if in contact with salivary calculus."

Examples of hidden septic foci are to be found in regions of necrosis in the epithelial attachment and the epithelium of the soft-tissue wall of the pocket (Box; 1944;[6] 1945[7]). It will be recalled that the epithelial attachment occurs as a band of stratified epithelium which encircles the tooth, is organically joined with the tooth surface, and unites the oral epithelium with it. (Fig. 3, Fig. 4.)

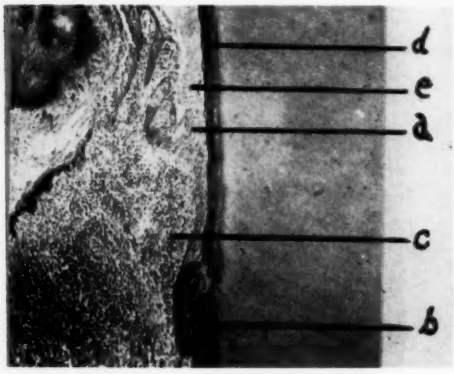

Fig. 3—Necrosis of epithelial attachment.

a. necrotic epithelial attachment
b. vital epithelium of basal portion of attachment
c. inflammatory cellular infiltration of gingival connective tissue
d. cementum
e. cellular debris at base of periodontal pocket

The overlying gingival tissues completely hide these regions and, as yet, no method has been devised to detect them clinically. The investigations of Menkin (1950[8]) have shown that a factor termed 'necrosin,' which is damaging to normal cells, is liberated by injured cells. This toxic substance is able to produce lymphatic blockade and swelling of collagenous bundles, and to cause vascular damage. From certain important observations, it is indicated that necrosin can enter the systemic circulation from a focus. It has been demonstrated by Menkin that when necrosin has been injected several times into the circulation of animals, severe injury to visceral organs has occurred.

THE PROBLEM OF ORAL DEBRIS

Microscopic studies of this soft deposit in contact with the soft tissues show that, in the main, it is comprised of desquamated epithelial cells, leucocytes in various stages of disintegration, and myriads of microorganisms. Near the soft-tissue surface in the debris, some cells

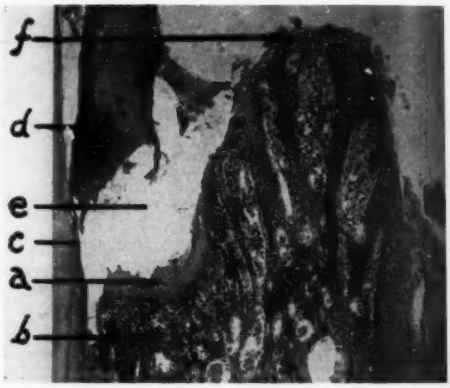

Fig. 4—Extensive necrosis of epithelium of soft-tissue wall of a periodontal pocket.

a. mass of necrotic epithelium
b. inflammatory cellular infiltration in underlying gingival connective tissue
c. cementum
d. calculus
e. shrinkage artefact
f. gingival margin

manifest little evidence of damage. These cells appear to have been loosened and set free from the outer epithelial cells, in groups or singly, by destruction of the substance that keeps the cells together. The process of separation is probably enzymatic.

Many other cast-off cells show various signs of nuclear injury. The soft debris usually contains nuclei, and nuclear fragments of leucocytes. (Fig. 5.)

When the disintegration of the cells is complete, a homogeneous material is formed which teems with countless microorganisms. They in-

clude complex formations such as have been described by Beust, Aisenberg, Tunnicliff, Goadby, the Deans, and other workers.

In some regions, the surface of the soft tissues shows zones of necrosis in which the structure of the part, in general, is faintly perceptible but the cell boundaries have disappeared. All the nuclei of the outer cells have been obliterated. The necrotic tissue fuses with the contacting debris. Farther in from the surface, in the zone of transition into healthy cells, the nuclei of many cells show signs of injury. In other regions of the surface, the epithelial cells show varying degrees of nuclear injury. (Fig. 6, Fig. 7.)

There is to be seen in these complex changes taking place in the debris-soft tissue zone, the operation of a vicious cycle. With the accumulation of cellular debris, there is an increased growth of microorganisms in it, and an increased production of irritating or even toxic substances. This is followed by injury and death of other cells which are then added to the debris, thus helping to perpetuate the process.

The problem of oral sepsis of this nature is not so much the entrance of microorganisms into the tissues and their growth therein, but the enhanced growth of microorganisms in the debris with the creation of toxic substances. These, along with necrosin, which is produced by injured cells, are factors which may bring about systemic disturbances.

It must not be inferred, however, that this form of oral sepsis is a simple process established solely by extrinsic agents. As in the case of periodontal diseases, it is brought about through the operation of direct and predisposing factors. Of the latter, the chief agent would appear to be disturbances of nutrition, e.g. ascorbic acid deficiency.

That a diseased mouth is able to produce an injurious effect on the body, in some manner, has been observed since early times. When thorough treatment of periodontal and gingival diseases has been carried out, dentists have frequently observed beneficial changes in the general health of patients. Forty-one years ago it was stated by Marshall that the importance of oral sepsis as a menace to individual and public health was not generally recognized by the medical profession. Can it be said that in 1953 the situation is greatly changed? Much of the

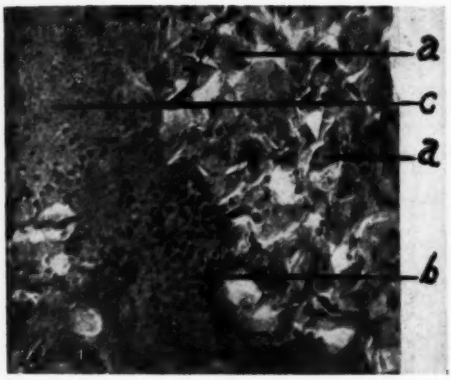

Fig. 5—Desquamated epithelial cells showing various stages of injury and breakdown, inflammatory cells and cellular debris near gingival margin.

a. cast-off epithelial cell
b. group of nuclei of leucocytes
c. homogeneous debris pervaded with microorganisms

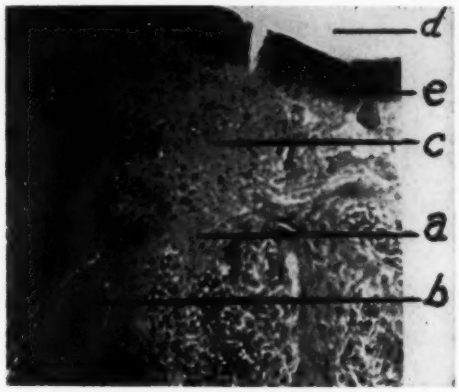

Fig. 6—Necrotic epithelium of the gingival surface blending with cellular debris near enamel border.

a. necrotic epithelium
b. vital epithelium
c. cellular debris
d. enamel space
e. filamentous organisms on enamel cuticle

medical sceptism of today, without question, rests on the too-frequent disappointments in the results achieved. Some of the failure to bring about the desired results may be attributed to several factors. These include inadequate conceptions of oral sepsis, defective diagnoses, and a lack of success, dentally, to eradicate many sources of oral sepsis.

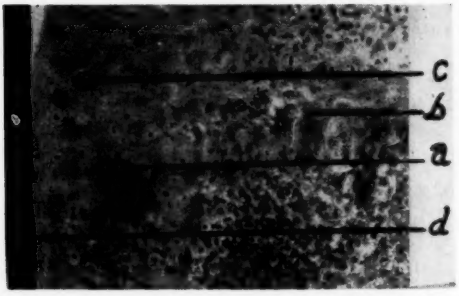

Fig. 7—Necrotic epithelium of epithelial attachment and pocket base blending with cellular debris of periodontal pocket.

a. necrotic epithelium
b. vital epithelium
c. cellular debris
d. cementum surface

The etiologic relationship between oral sepsis and systemic conditions is not fully understood. Certain recent developments have made it plain that some older concepts concerning this problem had to be modified. Thus, the explanation changes but the clinical evidence of relationship remains a reality.

With the discovery of necrosin and its possible systemic implications, and with the great probability that the rate of utilization or destruction of ascorbic acid is definitely increased when gingival and periodontal diseases are present, and that these conditions can act as a stress from the standpoint of adrenocortical function,[9] it is obvious that new concepts have to be developed.

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ALICUN FONTES OCCULTE DE SEPSIS ORAL

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SUMMARIO IN INTERLINGUA

Le fontes de sepsis oral include, secundo le conception general, morbos gingival e periodontal, suppurative e gangrenose pulpas dental, abscessos periapical, e necrotic fragmentos de radices. A iste fontes on deberea adder "lingua cargate" e tonsillas lingual inficite. Altere exemplos de factores local cuje importantia in iste contexto es frequentemente negligite es texitos gingival in contacto con imperfecte margines plumbal, e texitos in defective contactos de mucosa con dente pontic o in inadequate relationes de agrafe e gingiva. In iste lista nos etiam pote includer le dentes in position imperfecte que frequentemente participa in le production de conditiones septic local. (Vide fig. 1 e fig. 2.)

Exemplos de occulte focos septic es a trovar in areas necrotic in le attachamento epithelial e le epithelio del pariete de saccos. (Vide H. K. Box, *J. Can. D. A.*, 10:427, 1944, e *Oral Health*,

35:321, 1945.) Le lector sape que le attachamento epithelial occurre in le forma de un banda de epithelio stratificate que circumfere le dente, es organicamente connectite con le superficie del dente, e junge le epithelio oral con illo. (Vide fig. 3 e fig. 4.)

Studios microscopic de iste molle deposito que es in contacto con le molle texito monstra que illo consiste principalmente de desquamate cellulas epithelial, leucocytos in varie stadios de disintegration, e myriades de microorganismos. Proxime al superficie del molle texito, alicun cellulas in le detrito exhibi pauc signos de damno. Il pare que iste cellulas se ha distaccate e liberate ab le cellulas del epithelio exterior—o in gruppos o individualmente—per le destruction del substantia que servi de ligatura inter le cellulas. Le processo de separation es probabilemente enzymatic.

Multe altere cellulas desquamate exhibi varie signos de damno nuclear. In general le molle detrito contine nucleos e fragmentos nuclear de leucocytos. (Vide fig. 5.)

In iste complexe cambiamentos que occurre in le zona de contacto inter detrito e texito molle on pote observar le functionamento de un circulo vitiose.

Assi como le detrito cellular es accumulate, assi se augmenta le crescentia de microorganismos in illo e consequentemente etiam le production de substantias irritante o mesmo toxic. Isto resulta in le lesion e le morte de altere cellulas que es addite al detrito e contribua al perpetuation del processo.

In consequentia del discoperta de necrosina con su possibile importantia pro le systema general—conjunctemente con le forte probabilitate que le rata de utilisation o de destruction de acido ascorbic es definitivemente accelerate in le presentia de morbos gingival e periodontal e le facto que iste conditiones representa un stress (in le senso del theoria del functiones adrenocortical) —nos trova nos confrontate con le necessitate de disveloppar nove conceptos.

NINTH ANNUAL MEETING

AMERICAN ACADEMY OF DENTAL MEDICINE

May 13, 14, 15, 1955 at New York City

YOUR HOSTS—THE NEW YORK SECTION

DIAGNOSIS AND TREATMENT PLANNING FROM THE STANDPOINT OF ENDODONTICS*

SAMUEL SELTZER, D.D.S.†

With modern concepts of dental therapy, it is inescapable that diagnosis and treatment planning for every patient must be based upon the needs of the total organism rather than upon the correction of an individual tooth defect. Inevitably, in planning the best therapy for an entire mouth, a tooth with actual or potential pulp involvement must assume a critical role. Often the loss of one tooth may necessitate a change in an entire treatment plan. This is true whether the plans require the placement of a crown, a bridge, a denture, or complete mouth reconstruction. A pulpless tooth, if retained, can make the difference between a crown and a bridge, a bridge and a partial denture, a partial denture and a full denture.

From the standpoint of Endodontics, diagnosis and treatment planning will be discussed in the following categories:

(1) Lesions of the teeth which involve exposure of the dentin.
(2) Lesions of the pulp.
(3) Lesions of the periapical tissues.

1. Lesions of the teeth which involve exposure of the dentin.

Any lesion which causes the dentin to be exposed involves the dental pulp. As soon as dentinal tubules are opened, protoplasmic processes from the odontoblasts lining the pulp are exposed to oral fluids. This initiates a defense mechanism which results in the laying down of a layer of secondary or irregular dentin. At times, the irritant is severe enough to produce inflammatory changes in the pulp. Fractures, attrition, abrasion, erosion, dental operations (cavity preparation, grinding, crown preparation, etc.) and dental caries are the factors which are responsible for exposure of the dentin.

A tooth with a fracture of its crown involving the dentin must be tested for vitality and examined carefully under a magnifying lens to determine whether or not a pulp exposure has been made. Oftimes the pulp may be exposed without detection. In some of these instances, the pulp may repair itself following placement of the restoration; in others the pulp may subsequently become inflamed or even undergo necrosis without giving rise to symptoms. It is therefore a wise precaution to line the dentin with calcium hydroxide before placing the final restoration. In treatment planning it would be advisable to wait for at least 6 weeks to 2 months before planning any further operation on this tooth. This enables the pulp to protect itself against the damage caused by the fracture. In addition, a vitality test should be made again after the waiting period has elapsed. The force of the blow causing the fracture might have ruptured blood vessels within the pulp resulting in its eventual necrosis.

Where the fracture has obviously exposed the pulp, the procedure of choice is partial pulpectomy, especially in young children where root end formation has not yet been completed. In those cases it is especially important to maintain vitality of the apical pulp tissue so that formation of the end of the root can be completed. If, however, the pulp is completely necrotic, the ideal plan of treatment is root canal therapy and apical curettage. The root canal is more readily filled after the root end has been exposed. The apex, being funnel shaped, cannot be filled properly in the conventional manner.

A pulp exposed by fracture must be treated as quickly as possible. Continued contamination of the pulp by oral fluids decreases the chance

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for success. The amount of pulp tissue removed by the operator is governed by the clinical appearance of the pulp stump. The remaining pulp tissue, following removal of the damaged portion, should be firm and adherant and the hemorrhage should be bright red in color. A blood clot should be permitted and the clotting mechanism should never be interfered with by bathing the pulp with drugs or pushing cements into it. The treatment plan must take into consideration the possibility that repair might not take place. Root canal therapy might still have to be performed at a later date. Hence crowns with posts in the roots should not be placed until the success of the operation has been assured.

If the crown has been fractured at or slightly below the gingival margin, complete root canal therapy must be performed. Here a post-crown will have to be placed. Subsequent failure of the apical pulp tissue to repair can be treated by exposing the root end and resealing the apical foramen.

Fractures of the roots of anterior teeth are best treated merely by careful observation if the fragments are in good apposition and there are no other symptoms. Oftimes the pulp retains its vitality and repair is effected by the deposition of secondary cementum. If the pulp subsequently dies, root canal therapy can be performed. At times it may be necessary to expose apical fragments surgically through a window in the bone and remove them.

The diagnosis of abrasion, attrition or erosion is readily made upon clinical examination. These lesions all cause the formation of secondary dentin as a protective mechanism. However, at times, the disease proceeds so rapidly that it outstrips the rate of secondary dentin formation and pulp exposure results. Extensive destruction, therefore, may call for complete coverage of the crowns of the affected teeth. Generally the dentin exposed by attrition and abrasion is not sensitive. In erosion, however, the dentin is usually hypersensitive. Irritating drugs placed on eroded areas might cause more damage than the erosion itself. They should therefore be avoid. A restoration is more desirable and less likely to cause pulp inflammation if a zinc oxide and eugenol base is placed first.

Dental operations, themselves, are responsible for a great many pulp lesions. Grinding teeth in the preparation of veneer crowns suddenly uncovers millions of dentinal tubules. The subsequent irritation following the heat of drilling might be too much for the pulp to cope with, especially in younger individuals where very little, if any, secondary dentin has been produced. Extensive cavity preparation itself exposes the pulp to irritation which it may be unable to handle. Where deep cavities are present, the pulp is already engaged in a fight to protect itself against the oncoming destructive process. Judicious treatment planning would therefore dictate that decay, where it is extensive, should be removed gradually at several sittings and over a 1 to 2 month interval. This gives the pulp time to protect itself by secondary dentin formation. Pulp exposures might thus be avoided. For the same reason, the use of caustic and irritating drugs on exposed dentin should be avoided. It has been generally believed that drugs which coagulate albumen, such as phenol, silver nitrate, thymol, etc., should be placed on carious dentin to "sterilize" it or at least to seal the dentin against further irritation. Recent studies, employing radioactive isotopes, have shown that the exact reverse is true. Not only do these drugs *not* seal the dentin, they actually render it more permeable. A wiser procedure is to seal the dentin between sittings with zinc oxide and eugenol. Under this dressing, the pulp is sedated and protected from external influences. Zinc oxide and eugenol is not recommended, however, for use over pulp exposures. Here again the same philosophy applies i.e. irritants should not be used on the pulp. Eugenol produces a chronic inflammatory response when it is applied directly on the pulp. Repair may never take place.

Filling materials themselves are often responsible for pulp damage and pulp death. Silicates, for example, when placed in deep cavities in younger individuals can cause necrosis of the pulp. Acrylic resins, although apparently reasonably innocuous by themselves,

are capable of producing pulp damage because they shrink. They also have a different coefficient of expansion than tooth structure. Thus saliva is able to percolate through the margins, thereby producing inflammatory changes in the pulp.

As a precaution, operations on all deep carious lesions of the dentin, where pulp exposure may be suspected, should be performed under the rubber dam. All these lesions should be lined with calcium hydroxide and zinc oxyphosphate cement.

2. Lesions of the Pulp.

Chronic lesions of the pulp usually present few problems in diagnosis. Chronic ulcerative pulpitis is usually readily detected, either from the radiogram, which shows decay under a restoration which has already penetrated the pulp, or by removing carious dentin and exposing the pulp readily. Usually there has been little or no pain. The treatment of choice is pulp extirpation.

Chronic hyperplastic pulpitis is usually found in children. There is always a large compound cavity. The pulp has grown out of the cavity and looks like gingival tissue which has grown in. There is very little pain except upon pressure. The treatment of choice is pulpotomy.

Acute lesions of the pulp are often responsible for producing the severest kind of dental pain. An acute partial pulpitis may defy detection for long periods of time. Referred pain frequently diverts attention from the offending tooth. Establishing a diagnosis is often so difficult that patients have been known to be treated by neurologists for neuralgia, otolaryngologists for earaches and sinusitis, opthalmologists for eye pains and internists for headaches when pulpitis was responsible all the time. Once a total pulpitis develops and the periodontal membrane becomes involved, the pain begins to localize in the tooth which is responsible. After the pulp becomes necrotic, referred pain usually stops and diagnosis becomes fairly easy.

The problem of diagnosis of an acute pulpitis becomes even more complicated when all the teeth are crowned following occlusal reconstruction. Under these circumstances most of the diagnostic tests such as the electric pulp test, thermal changes, percussion, palpation, radiograph, and transillumination, are valueless. The referred pain itself may be used as a guide in locating the offending tooth. According to Head, teeth have definite areas of pain referral, listed as follows:

Maxillary teeth

Central and lateral incisors refer pain to the frontal region,
Canines and first bicuspids refer pain to the nasolabial region,
Second bicuspids refer pain to the temporal and maxillary regions,
First molars refer pain to the maxillary region,
Second and third molars refer pain to the mandibular region.

Mandibular teeth

Incisors, cuspids and first bicuspids refer pain to the mental region,
Second bicuspids refer pain to the hyoid or mental region,
First and second molars refer pain to the ear and behind the angle of the jaw,
Third molars refer pain to the superior laryngeal area and to the ear.

In addition, local anesthesia is of inestimable value in helping to locate a tooth with pulpitis. A mandibular block injection will determine in which jaw the tooth is located. From the referred pain areas, the choice can often then be narrowed to 1 or 2 teeth. The offending tooth is usually the one with the deepest restoration. It is noteworthy that pulpitis never occurs simultaneously in more than one tooth, even though several teeth may consecutively become involved. Also, pain is never referred to the other side of the same jaw, although it may be referred from maxilla to mandible (or vice versa) on the same side. Once a pulpitis has developed in a tooth, pain may be referred to any other teeth on the same side.

For differential diagnosis of the various pulpitedes, the reader is referred to appropriate textbooks.

3. Lesions of the Periapical Tissues.

Most periapical lesions are the sequellae of untreated or unresolved pulp lesions. Depending upon the virulence of the infecting microorganism, the resistance of the tissues and other factors, a granuloma, cyst or abscess is formed at the apex of a tooth. It is impossible to make a diagnosis of these lesions on the basis of a radiograph alone. Microscopic examination of the tissue itself is essential for the establishment of a diagnosis.

Periapical bone destruction in itself is not evidence of the presence of infection. A great many periapical areas of rarefaction are sterile when cultured bacteriologically. For example, sterile pulp deaths often occur as a result of a blow. Necrosis of the pulp which follows produces breakdown products which act as inflammatory agents. If untreated, periapical bone destruction follows. Bone destruction may also follow root canal therapy, performed aseptically, if irritating drugs or instruments are pushed into the periapical tissues.

Other lesions are often found by radiographic examination which simulate periapical lesions. In these instances, pulp tests of the associated teeth will reveal that their pulps are vital, thus ruling out the pulp as the etiologic factor. Among the systemic conditions which may produce differences in the density of the bone shadow are osteitis deformans, fibrous dysplasia, eosinophilic granuloma, Schuller-Christian's disease, hyper-parathyroidism, Gaucher's disease and neoplasms of either local or metastatic origin.

Locally, a lesion resembling a periapical granuloma or cyst is that of a cementoma. This is usually irregularly outlined and sometimes shows bone formation in the center. The exact etiology is unknown although it is believed to be due to traumatic occlusion.

At times, embryonal epithalial remnants proliferate to form cysts such as median cysts, globulomaxillary cysts, incisive canal cysts and nasolabial cysts.

Various anatomic landmarks may simulate periapical lesions. Among these are the maxillary sinus, the nasal cavity, the anterior palatine foramen, the mental foramen and nutrient canals. To avoid mistaking these landmarks for pathological conditions the following procedures may be employed:

(1) Vitality test.

Although the present-day pulp tester has its limitations, if a tooth responds to it as well as to heat and cold, the pulp is probably vital and the condition is probably an anatomic landmark.

(2) Check the lamina dura.

If the lamina dura extends all around the root, intact and unbroken, conditions are normal.

(3) X-ray at different angles.

A pathologic lesion will not shift from the apex of the tooth. A normal landmark will bear a different relationship to the tooth at each different angle.

Once the diagnosis of a pulp or periapical lesion has been established, what treatment should be planned? The possible modes of treatment are (1) Pulp protection, (2) Pulp capping, (3) Pulpotomy, (4) Pulpectomy and root canal therapy, (5) Periapical curettage, (6) Root resection and (7) Extraction. The indications for each will be discussed.

PULP PROTECTION

Whenever a deep cavity is present, the possibility of exposing the pulp by thorough excavation of all the decay exists. Since it is virtually impossible to prevent the forcing of some infected material into a pulp exposure, this should be avoided whenever possible. The treatment to be described pertains only to those teeth in which the pulp is not inflamed i.e. where pulpitis does not exist. Once a diagnosis of pulpitis has been made, it is wiser to resort to pulpectomy.

All teeth with deep-seated carious lesions should be treated under the rubber dam. Thus if the pulp is accidentally or intentionally exposed, it will not be contaminated by saliva. Decay is then removed gradually, but completely, in several sittings over a span of several months. The cavity is filled with zinc-oxide-eugenol cement after each treatment. No other drugs are placed on the dentin. After several months, the pulp will have protected itself with secondary dentin and the possibilities of ex-

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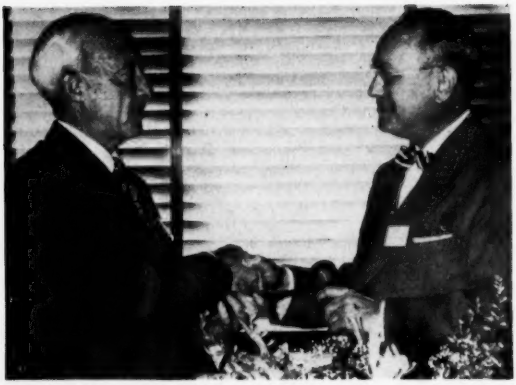

THE GAVEL CHANGES HANDS—Outgoing President, the late Alvin H. Berman (right), presents the gavel to incoming President, George F. Clarke.

DISCUSSION GROUP (l. to r.) Seymour Pollock, Moderator; Samuel Seltzer, Morton Amsterdam, Jack L. Balin, and Samuel Charles Miller, assisted by Nathan A. Lewis (not in Photograph).

ACADEMY LADIES ON THE GO—Li[illegible]in accompa[illegible] trip of Pi[illegible]lley Forge.

PHILADELPHIA CONVENTION COMMITTEE (l. to r.) A. Weinberger, S. Pollack, G. Stewart, J. Rothner, S. Kaplan, S. L. Rosenthal, Chairman; B. Saturen, and L. Sukin.

1954 ACADEMY OFFICERS (l. to r.) Irving Yudkoff, Editor; William M. Greenhut, Secretary; George F. Clarke, President; S. Leonard Rosenthal, President-Elect; William H. Copperthwaite, Vice-President; and George G. Stewart, Treasurer.

PRESENTA[illegible]
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HIGHLIGHTS OF THE

ADE DENTAL MEDICINE

h Meeting

OD H PHILADELPHIA, PA.

AY 1 6, 1954

PLAQUE PRESENTATION—Past President George A. Bruns (left), presents the President's plaque to the late Alvin H. Berman as Mrs. Berman looks on.

E GO—L n accompanies the ladies on a sightseeing trip of Pl lley Forge.

FELLOWSHIP PRESENTATION—Past President J. Lewis Blass presents an Academy Fellowship to Harry Roth.

RESENTATION—Past President Harold s a Fellowship in the Academy from Past ent Samuel Charles Miller.

FELLOWSHIP PRESENTATION — Albert Laferriere is presented with a Fellowship in the Academy by Past President Samuel Charles Miller.

posure will have been greatly reduced. If secondary dentin is not produced, the pulp will become exposed and will be found to be either atrophied or necrotic. In either case, root canal therapy must then be performed.

PULP CAPPING

Excellent results following pulp capping of deciduous and young permanent teeth have been reported consistently in the literature. In adults, however, pulp capping is still a questionable procedure. In children and young adults, therefore, pulp capping might be performed with a reasonable chance for success in teeth which do not give a history of pulpitis. The chances for success are decreased if the exposure has been made without the use of the rubber dam. As a rule, mechanical exposures are amenable to pulp capping. However, mechanical exposures made during veneer crown preparation are poor risks for pulp capping because they are invariably contaminated. Even if this were not true, the pressure of impression bands and temporary crowns would soon cause pulpitis. These teeth are best treated by root canal therapy.

PULPOTOMY

Where a vital pulp is exposed, either by fracture or caries, in a young individual and symptoms of pulpitis have not developed, pulpotomy has an excellent chance for success. Pulpotomies are especially indicated in deciduous teeth and young permanent teeth where roots are not completely formed. A pulpotomy should never be performed even in these teeth, however, if the pulp stump does not look healthy and does not form a blood clot from bright-red blood.

PULPECTOMY AND ROOT CANAL THERAPY

Where pulpitis or pulp necrosis exists the treatment of choice is removal of the pulp and complete root canal therapy. This may be performed for any tooth providing it can meet the following requirements:

(1) The root canals are accessible.
(2) The root canals are patent and penetrable to the apex.
(3) If a large amount of tooth structure is lost a sufficient amount upon which to build a crown still remains.
(4) Asepsis can be maintained.
(5) There is sufficient periodontal support to maintain the tooth in its alveolus.

When other teeth are missing, the question of whether to perform root canal therapy or extract the tooth and replace it is bound to arise. A good general rule to follow and help in arriving at a decision in these instances is to decide whether the loss of this tooth would necessitate the construction of a partial denture rather than a fixed bridge. If this is true it would be preferable to perform root canal therapy. Where a great many teeth are missing and a partial denture is to be constructed, every remaining tooth with pulp involvement should be treated rather than extracted because of the danger of overloading the abutments with an extensive denture.

If very few natural teeth remain and the loss of 1 more tooth means that a full denture would have to be constructed, the decision of whether or not to perform root canal therapy should be based upon psychologic factors. If the patient objects to a full denture to the extent that it would be traumatic, psychologically, root canal therapy is the treatment of choice for every remaining tooth with pulp or periapical involvement.

In mouths with extensive periodontal involvement, every remaining natural tooth assumes strategic importance. Loss of additional teeth may reduce the periodontal support to such an extent that retention of all the other teeth may become doubtful. Hence root canal therapy in these cases is the preferred treatment.

Root filled teeth are dependable as abutments provided they are covered with veneer crowns.

PERIAPICAL CURETTAGE AND ROOT RESECTION

In the operation known as apicoectomy, periapical curettage is always performed along with resection of the root end. This has always been a popular procedure for anterior teeth exhibiting large areas of rarefaction and in certain other circumstances. However, the size of a periapical area should not be the criterion for

determining whether this operation should be done. Periapical curettage alone should be performed under the following circumstances:

(1) Where time for conservative treatment does not exist. For example, where a patient is only available for a one visit procedure before leaving town for a prolonged period.

(2) Where conservative treatment has been done and healing has subsequently not taken place.

(3) Where a root canal instrument has been broken and projects beyond the apex of the root.

(4) Where a post crown has been placed in a root and a periapical lesion has subquently developed. In addition to the curettage, the root canal end should be filled after it has been exposed.

In addition to periapical curettage, root resection sometimes becomes necessary in the following circumstances:

(1) Where the root end is either incompletely formed or so eroded that a funnel shaped opening is present.

(2) Where the lesion extends palatally and cannot be reached by a curette without removing part of the root.

(3) Where the root end is fractured and conservative treatment appears to have a poor prognosis.

(4) Where the root end has been perforated near the apex and healing of a periapical lesion has not taken place.

(5) Where an instrument has been broken in the apical third of the root canal and it cannot be bypassed or where the instrument is broken off beyond the apical foramen.

No mention has been made of periapical areas which have been labeled as cysts from their roentgenographic appearance. It is not possible to make a diagnosis of a cyst from an x-ray negative. Lesions which appear to be cysts often heal following conservative treatment.

EXTRACTION

Teeth with pulp or periapical involvements should be extracted if they cannot meet the requirements listed under Pulpectomy and root canal therapy. In addition, there are some patients who, despite efforts by the dentist to educate them about the necessity for conservation of their natural teeth, place no value upon their teeth. For these patients, unfortunately, extraction must be performed once pulp or periapical lesions develop.

Endodontic procedures, fortunately, have advanced and improved to such an extent that more and more natural teeth can be retained. In the final analysis the dentist, thereby, is enabled to fulfill his ultimate duty to his patient i.e. the preservation of the patient's natural dentition.

2035 Spruce Street,
Philadelphia, Pa.

DIAGNOSE E PLANIFICATION THERAPEUTIC DEL PUNCTO DE VISTA ENDODONTIC

Dr. chir. dent. Samuel Seltzer

SUMMARIO IN INTERLINGUA

Le diagnose e le planification therapeutic es discutite del puncto de vista endodontic sub le sequente titulos:

(1) Lesiones dental con exposition del dentina;
(2) Lesiones del pulpa;
(3) Lesiones del texito periapical.

Le mechanismo defensive que occurre post le exposition del dentina resulta in le formation

de un dentina secundari. Si le agente irritante es pauco forte, nulle cambiamento additional occurre. Si le agente irritante es sever, cambiamentos inflammatori occurre in le pulpa. Le tractamento depende del grado de affection del pulpa. Es discutite le indicationes pro cappellos de pulpa e pro pulpotomia.

Le effectos de operationes dental e le materias de plumbage usate es frequentemente nocive al ben-esser del pulpa. Le prevention de tal insultos resulta in render innecessari un futur extraction o therapia del canal de pulpa. Un discussion del proprietates irritante del substantias de plumbage ha le objectivo de assister le practico in evitar tal complicationes.

Es notate le indicationes pro therapia del canal de pulpa, pro curettage periapical, e pro apicoectomia e extraction.

Es presentate un technica diagnostic in casos de pulpitis acute. Isto es de interesse special quando le dentes es integremente revestite de coronas artificial. Le areas de transposition de pena es importante in diagnoses differential. Illos es signalate in detalio.

Lesiones periapical pote esser cystes, abscessos, o granulomas. Illos es etam simile a altere lesiones de origine in le systema general e frequentemente a characteristicas anatomic.

GREATER NEW YORK DENTAL MEETING

The Greater New York Dental Meeting, sponsored by the First and Second District Dental Societies will be held at the Hotel Statler, New York City, on December 6, 7, 8, 9 and 10, 1954. Additional information regarding this meeting will be issued at a later date. Inquiries may be addressed to The Greater New York Dental Meeting, Room 106A, Hotel Statler, New York 1, N. Y.

MID-WINTER MEETING

AMERICAN ACADEMY OF DENTAL MEDICINE

Sunday, December 5th, 1954

HOTEL STATLER, NEW YORK CITY

AMERICAN ACADEMY OF DENTAL MEDICINE ANNUAL AWARD

Upon recommendation by their respective medical and dental colleges the following senior students have been nominated for the Award for Proficiency in Dental Medicine given annually by the American Academy of Dental Medicine. This award consists of a duly inscribed certificate and a five year subscription to the Journal of Dental Medicine.

MEDICAL SCHOOLS

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DONALD BERNSTEIN 6217 Orange St., Los Angeles 48, California.	Gordon E. Goodhart, Dean, University of Southern California School of Medicine.
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*IRVIN M. GOLDING 5550 Raleigh St., Pittsburgh 17, Pa.	W. S. McEllroy, Dean, School of Medicine University of Pittsburgh.
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Medical Views on Oral Problems

ERYTHEMA MULTIFORME EXUDATIVUM*

In recent years internists, rather than dermatologists, emphasized the great importance of Mycobacterium tuberculosis and Streptococcus hemolyticus as causative agents for erythema multiforme exudativum. At the dermatological department of the University of Groningen, Netherdans, 17 patients with typical erythema multiforme exudativum, corresponding in every respect with the criteria established by Hebra, were studied by the authors concerning these two causative agents. Results of Pirquet's and Mantoux tests, roentgenologic examination of the lungs of the patients, otolaryngological and dental examination for local foci, and serologic examinations for streptococcic infections did not furnish any evidence in these patients of either causative agent. The authors believe this discrepancy can be explained by the fact that those workers have not sufficiently differentiated the classic forms of erythema multiforme exudativum from the somewhat similar erythema multiforme syndrome. The cutaneous manifestations of the erythema multiforme syndrome are much less characteristic than the well-defined patch or the flat papule described by Hebra as the primary florescence of a typical case of erythema multiforme exudativum. While the simultaneous occurrence of erythema nodosum has not been observed with the idiopathic type, such combined occurrence is not rare with the erythema multiforme syndrome, particularly in those cases in which internal disease processes, particularly tuberculosis or streptococcic infections, and occasionally even drug hypersensitivity, form the basis for the cutaneous manifestations. While the causative factors of erythema multiforme exudativum are still unknown, the syndrome can be produced by many different causative factors. Any clinical diagnosis that is not based on morphological factors and is, therefore, not sufficiently distinctive must lead to errors. In the future the study of the causative factors must distinguish sharply between the two discussed groups on the basis of clinical morphology.

* Medical Literature Abstracts, J.A.M.A., March 20, 1954, p. 1039.

INJECTIONS IN OFFICE PRACTICE*

Many physicians have had the experience of having patients call and say they want to come to the office to receive a "penicillin shot" for a cold. In spite of advice that penicillin is not the treatment for the common cold, he informs the physician that he will go where he can obtain such a "shot." Such an attitude probably stems from the fact that products such as penicillin and certain hormones, when first available, were more effective parenterally than orally. If patients could observe some of the very severe sensitivity reactions to penicillin they would be less insistent that such a drug be given. A single penicillin injection may result in hospitalization for days or weeks, because of hypersensitivity reactions with resultant fevers, eruptions, and arthralgias. If the patient is still less fortunate, anaphylactoid reactions may occur, and death has resulted from such reactions. The author mentions other antibiotics that may cause annoying reactions. The injection of hormones is also frequently abused. Estrogen therapy for the climacteric in women should be reserved for palliation of severe vasomotor and psychosomatic disturbances. Such therapy is not essential for all women. Injections of vitamins are also frequently demanded by patients, although with a normal gastrointestinal tract, vitamins administered orally are just as efficacious as when given parenterally. Some vitamins, such as impure preparations of vitamin B, given intravenously have caused distressing symptoms, such as dyspnea, precordial distress, nausea and a sudden fall of blood pressure. Mercurial diuretics, however, preferably should be given parenterally either intramuscularly or intravenously, because although mercurial preparations for oral administration are available, they are much less effective. Many medications are just as effective and less dangerous if given orally than parenterally, and this should be impressed on patients.

* Medical Literature Abstracts, J.A.M.A., March 27, 1954, p. 1134.

TREATMENT OF CANCER OF TONGUE AND ITS CERVICAL METASTASES WITH IRRADIATION*

Between 1936 and 1948, 94 patients with cancer of the tongue were treated with irradiation by heavily filtered low intensity radium needles for the tongue lesions and combined radium needle and roentgen ray therapy for metastatic cervical lymph nodes. A five year cure was obtained with this non-surgical method in 30 (32%) of the 94 patients. Complete healing of the primary lesion in the tongue was observed in 67 patients (71.2%). Fifty-six (59.2%) of the 94 patients had palpable cervical lymph nodes; a satisfactory result was observed after five years in 10 (17.8%) of these patients in whom block dissections were not done. The nodes completely disappeared in 39 (70%) of the 56 patients, and death was due to other causes in many of them. The palliative value of

the irradiation method used by the author is indicated by complete healing of the primary lesions and disappearance of nodes in approximately 70% of the patients treated.

* Medical Literature Abstracts, J.A.M.A., April 17, 1954, p. 1394.

DIAGNOSIS AND TREATMENT OF MIGRAINE AND TENSION HEADACHE*

Periodicity and recurrence, positive family history, cortical phenomena, gastrointestinal disturbance, unilateral nature as well as shifting of pain in the head, and positive response to ergotamine products indicate a diagnosis of migraine. If most or all of these characteristics are present, the migraine is typical, but oftener it appear in an atypical form. Typical migraine has three vascular phases, namely (1) vasoconstriction, (2) vasodilatation, and (3) edema. During the usually short (half hour) prodromal phase vasoconstriction involving the intracranial arteries occurs and produces scotoma, hemianopsia, paralysis, diplopia, paresthesia, and aphasia. During vasodilatation, headache is experienced, and associated symptoms are anorexia, nausea, vomiting, diarrhea, dizziness, fever, palpitation, and excessive perspiration and urination. There may be flushing or pallor of the face, reddening of the conjunctivas, and nasal congestion. Although the stage of edema is not commonly seen, when observed, it is characterized by swollen, hard, and tender extracranial vessels on the side of the headache. The throbbing headache of the vasodilating phase evolves into a constant sharp pain with tenderness, usually in the frontal, temporal, and parietal regions, that lingers until the attack has subsided. During this phase vasoconstrictive agents are not only ineffective but may aggravate the pain. The history is the most important diagnostic aid, but provocative tests with nitroglycerin sublingually, histamine subcutaneously, or nicotinic acid are helpful. "Tension headache" is a pain in the head arising from "tension," a state of nervous hyperirritabilty, which results from emotional stimulation or conflict. Migrainous patients often say, "I have two kinds of headache" and describe the dull, generalized headache of tension type and a severer type that comes periodically, perhaps once or twice a week or month. This is throbbing, unilateral (although it can be bilateral), and associated with nausea, photophobia, and perhaps vomiting. The migraine headache responds to ergotamine products, while the tension headache will not. Migraine is almost always associated with nervous tension. Drug therapy is usually enough to abort a mild attack, but, when moderate or severe, the migrainous attack becomes resistant to drug therapy and at times nothing is effective except sleep-inducing agents. The different vascular phases of migraine must be considered during treatment. Thus, during the early vasconstriction, vasodilators such as nicotinic acid, in does of 100 to 200 mg. by mouth, may abort the cortical phenomena, or inhalation of 10% carbon dioxide with 90% oxygen may be used, if nicotinic acid is not effective. During vasodilatation the vasoconstricting drugs are most important. However, many patients will get relief from simple measures such as aspirin or rest. One of the best vasoconstricting preparations is cafergot, a tablet containing 100 mg. of caffeine alkaloid and 1 mg. of ergotamine tartrate. For severer attacks, dihydroergotamine is recommended. Patients who have migraine as well as tension headaches must learn to rest and relax, to avoid fatigue. While migraine cannot be cured, much relief can be provided.

* Medical Literature Abstracts, J.A.M.A., March 20, 1954, p. 1037.

TONSILS AND ADENOIDS*

To the Editor:—The symposium on the tonsil and adenoid question in THE JOURNAL, Feb. 13, 1954, is a boon to those of us who cope with this problem daily and who will profit by these expert opinions. The deformity of excessive high palates with resulting nasal obstruction, although not part of this subject, is such a common factor in hypertrophy of the tonsils that it should be mentioned as part of the problem. Primary disease of the tonsils is not common. Tonsil enlargement is often due to neutralizing lymphatic absorption of nasal infections promoted by obstructions. In children with an allergic tendency, particularly distressing complicating symptoms are not relieved by tonsillectomy. The advantage in including nasal obstructions in this discussion is that, whether the tonsils are removed or not, when such obstruction is present early application of orthodontia procedures often lowers the nasal floor enough to separate the septum from the turbinates and give relief of symptoms.

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* Correspondence, J.A.M.A., March 20, 1954, p. 1025.

HAND-SCHULLER-CHRISTIAN DISEASE*

TO THE EDITOR:—*A girl with Hand-Schüller-Christian disease died at age 4 after about three years of illness. There are two healthy siblings, aged 8 and 10. The parents want another child but are afraid it might be affected. Is Hand-Schüller-Christian disease hereditary?*

Hubert W. Coleman, M.D., Avon Park, Fla.

ANSWER.—There is no evidence that lipid histiocytosis of cholesterol type (Hand-Schüller-Christian disease) is hereditary. The odds of another child being affected are so small that they do not represent an appreciable risk.

* Queries and Minor Notes, J.A.M.A., March 20, 1954, p. 1048.

ACTION OF STEROIDS IN NONSPECIFIC TISSUE INJURY*

Inflammation and necrosis are two related, but fundamentally opposed types of reactions to nonspecific tissue injury; the former is progressive and protective and the latter regressive and due to inadequate protection in the face of aggression. These findings are incompatible with the rather widely held view that hydrocortisone and allied compounds act by placing some protective barrier around the cells that shields them against potential pathogenes. Since these hormones can inhibit one action (inflammation) while aggravating another effect (necrosis) of the same agent, they cannot be visualized as mere insulators of cells against pathogens. On the contrary, the principal action of these steroids appears to be that they inhibit the development of granulomatous barriers between irritants and vital tissues.

* J.A.M.A., 152:1213, July 25, 1953.

PEMPHIGUS AND OTHER BULLOUS DERMATOSES*

Of 508 patients with serious bullous dermatoses observed at the Mayo Clinic since 1907, in whom the presence of pemphigus in any of its forms was suspected and whose records were studied by the authors, true pemphigus was diagnosed in 426, while forms of so-called pemphigus not classified as true pemphigus were diagnosed in 82. Of the 426 patients with true pemphigus, 226 had pemphigus vulgaris, 51 pemphigus vegetans, 27 pemphigus foliaceus, 20 pemphigus erythematodes, 30 pemphigus of the mucous membranes without cutaneous involvement, 53 pemphigus of the oral mucosa only, and 19 pemphigus of the oral mucosa and conjunctivas only. Of the 82 patients with so-called pemphigus not classified as true pemphigus, 20 had chronic pemphigus, 25 shrinkage of the conjunctivas, 3 butcher's pemphigus, 6 pemphigus neonatorum, and 28 familial benign chronic pemphigus of Hailey and Hailey. An attempt was made to correlate the clinical and pathological findings, based on follow-up studies. Results showed that forms of true pemphigus, such as pemphigus vulgaris, pemphigus vegetans, pemphigus foliaceus, and pemphigus erythematodes, can simulate clinically other conditions of less serious prognosis and vice versa. The same was true in pemphigus of the mucous membranes, chronic pemphigus, and familial benign chronic pemphigus. Histopathologically, it was concluded that true pemphigus, such as pemphigus vulgaris, pemphigus vegetans, pemphigus foliaceus, and pemphigus erythematodes, had definite features distinct from other forms of so-called pemphigus, such as chronic pemphigus and familial benign chronic pemphigus, and from other bullous dermatoses. It was not possible to differentiate pemphigus foliaceus from pemphigus erythematodes; differentation among pemphigus vulgaris, pemphigus vegetans, and pemphigus foliaceus was possible. The benign course of the disease in those patients who did not show acantholysis and the fatal outcome in those who presented definite acantholysis and who died primarily of pemphigus, warrant reclassification of these cutaneous lesions.

* Medical Literature Abstracts, J.A.M.A., April 3, 1954, pps. 1124-5.

CORTISONE GIVEN ORALLY IN TREATMENT OF PEMPHIGUS*

Conrad and his associates treated, with oral administration of cortisone, five patients with pemphigus vulgaris, 2 with pemphigus erythematosus, and one with pemphigus foliaceus. With the exception of the case of pemphigus foliaceus, in which treatment with cortisone by mouth produced little or no effect, the clinical response to oral therapy closely paralleled the response to the parenteral use of the drug. Laboratory findings likewise indicated that the responses to the oral use of cortisone are about the same as to its parenteral administration. Somewhat larger oral doses seem to be necessary for the control of the disease. The ease of oral administration of cortisone makes it the treatment of choice for pemphigus. Cortisone does not cure pemphigus, it merely controls its symptoms, and, as in arthritis, maintenance therapy must be continued indefinitely. Toxic phenomena can be kept under control with careful observation.

* Medical Literature Abstracts, J.A.M.A., March 27, 1954, p. 1123.

FLUORESCENCE OF NECROTIC CANCEROUS SURFACES UNDER WOOD LIGHT*

Ronchese and associates point out that Wood in 1903 utilized ultraviolet radiations passed through a nickel oxide filter to remove visible light. This invention has proved useful in medicine and many other fields and in the diagnosis of the ringworm of the scalp and a number of other dermatological disorders. In reviewing the use of the Wood light in the study of cancerous surfaces, the authors mention the peculiar fluorescence of epidermoid carcinoma, in contrast with basal cell carcinoma, as observed and discussed in France 20 years ago. No further investigation of this particular phase of fluorescence has since appeared in the literature. They assume that the reasons are, first, that the biological factors remained unknown and, second, the lack of demonstrative color illustrations. They obtained material for bacterial investigation from four patients with advanced carcinoma showing reddish-orange fluorescing areas under the Wood light. No red fluorescence or an uncertain fluorescence was elicited in cultures, and no difference was noted in the organisms obtained in fluorescing and nonfluorescing areas. Further investigations in one of these cases, however, resulted in the isolation

of a micro-organism that can be shown to produce a similar fluorescence under laboratory conditions. This organism is not properly a bacterium, but has the characteristics of the genus Streptomyces. The fluorescence that is bright red occurs only when this organism is grown on a culture medium that contains blood. The authors hope that further studies will clarify the relation of this organism to the peculiar fluorescence. While the phenomenon has been discussed in the past, this is the first time that satisfactory color photographs were obtained. The authors conclude that the peculiar vivid reddish-orange fluorescence elicited by the Wood light from necrotic ulcerated surfaces of squamous cell epitheliomas, in contrast to the uniform deep violet discoloration of other ulcerated surfaces (basal cell epithelioma, carbuncle, tubercular and syphilitic gumma, granuloma fungoides, pseudoepitheliomatous hyperplasia, and long-standing inflammatory process), is valuable in ruling out the above-mentioned conditions and considering the clinical diagnosis of epidermoid (squamous cell) carcinoma. The red fluorescence was regularly observed in open, necrotic adenocarcinomas of the breast and in one case of facial fibrosarcoma. It is not known what part adenomatous, sarcomatous, or epidermal cells play in the production of the red fluorescence. The only fact known is that for a lesion to elicit the fluorescence it must be a cancer, ulcerated, necrotic, and highly malignant.

* Medical Literature Abstracts, J.A.M.A., March 27, 1954, p. 1123.

HOW TO HELP PATIENTS STOP SMOKING*

To the Editor:—Many heavy smokers find it impossible to give up smoking for more than a day or so, even though they realize that smoking causes their unpleasant or even alarming cardio-vascular and bronchopulmonary symptoms. The patient may insist that, despite his tobacco-induced symptoms, the only time he feels emotionally relaxed and comfortable is when he is smoking. How can a physician help such a patient overcome his psychological need for smoking?

My observations show that, when a heavy smoker is not smoking, he often unconsciously hypoventilates to a marked degree (Syndrome of Spontaneous Hypoventilation, *Mississippi Valley M. J. 73*:133, 1951; Acute and Chronic Hypoventilation Syndromes, *Clin. Med. 59*:559, 1952), This hypoventilation may consist of shallow thoracic, diaphragmatic, and abdominal excursions of regular or irregular amplitude at a frequency of 10 to 18 breaths per minute. Occasionally the person may unconsciously hold his breath for 20 to 30 seconds and rarely as long as 40 seconds. When the patient is hypoventilating, he becomes uneasy, restless, tense, tired, and anxious. In addition, he may experience an uncomfortable sense of breathlessness and pressure in his interior chest resulting from unconsciously sustained hypertonia of his somatic respiratory musculature. He may have forceful heart action with a normal pulse rate or bradycardia or tachycardia. He may also have annoying ectopic beats. However, as soon as such a patient begins smoking, his pulmonary ventilation improves markedly. It is only when he is inhaling and exhaling tobacco smoke that he breathes close to the normal minute volume, and the symptoms caused by hypoventilation disappear.

As a result of these observations, it occurred to me that with breathing exercises, the heavy smoker might learn to breathe normally even when he was not smoking. This would make it much easier for him to break himself of the tobacco habit. I have prescribed breathing exercises in which the patient is taught to breathe out and then in 16 times a minute, neither hypoventilating nor hyperventilating. By practicing these breathing exercises for 5 minutes 8 to 10 times a day for a month, the patient gradually regains his ability to breathe in a manner that by inspection approximates normal pulmonary ventilation even when not smoking. Once a heavy smoker has acquired the habit of breathing properly, he can feel relaxed and comfortable when not smoking. After such preliminary training, 15 heavy smokers (each smoked over 50 cigarettes a day) found it possible to stop smoking without experiencing undue difficulty. Each of these patients had tried repeatedly before to give up smoking permanently, but without success.

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* Correspondence, J.A.M.A., May 22, 1954, p. 388.

FACIAL PARALYSIS IN INFANTS*

To the Editor:—A difficult delivery came through as a face presentation, and the forceps were used. Since birth the baby has had a paralysis of the right facial muscles. The mother thinks that the deformity is not as pronounced as it was. What is the prognosis?

ROBERT E. LITTLEJOHN, M.D.
Sequim, Wash.

Answer.—The facial paralysis in this infant is most likely the result of the marked extension of the head during labor and delivery. It is rarely due to intracranial causes. When it is central in origin, it is usually the result of congenital defects and the paralysis is bilateral in distribution. The prognosis for complete recovery in this baby is excellent. No treatment is indicated.

* Queries and Minor Notes, J.A.M.A., May 29, 1954, p. 534.

TREATMENT OF CARCINOMA OF TONGUE*

These authors† review studies on 113 patients with carcinoma of the tongue treated at the Radium Institute of Santiago, Chile, between May, 1930, and December, 1944. The fact that during this period 10,000 cases of cancer were observed at the institute indicates that lingual cancer accounts for about 1% of all cancers. The 113 cases included 15 women. Fifty-one, or nearly half, of the patients were between 50 and 59 years of age. Fifteen of the 113 patients received no treatment because the cancer was too far advanced. In 37 of the 98 who were treated, no follow-up studies were made. Of the 61 patients who could be traced, 5 are alive and without evidence of cancer at the end of five years. Leukoplakia and traumatic irritation by a sharp tooth appear to be the most important predisposing factors to the development of lingual cancer. Lesions of the anterior two-thirds of the tongue were treated with interstitial radium needles and those of the posterior third with external roentgen irradiation. Lymph node metastases from cancer of the anterior two-thirds of the tongue were treated by radical neck dissection. Lymph node metastases were present in 75.2% of all cases. Prophylactic neck dissection is advised.

* Medical Literature Abstracts, J.A.M.A., May 15, 1954, p. 321.

† A. Rahausen and C. Sayago. Am. J. Roentgenol. 71:243-250 (Feb.) 1954.

CLINICAL PROBLEMS CREATED BY ANTIBIOTIC THERAPY*‡

The possibility that antibiotic therapy may lead to complications of varying severity should be carefully considered before it is prescribed in any given case. Recovery may be seriously delayed by the appearance of entirely new and unsuspected infections as a result of the changes produced by antibiotics in the bacterial flora of the human body. Secondary infections are most apt to develop in elderly patients, those with chronic disease, and those in whom treatment has been prolonged. Monilia multiply luxuriantly during antibiotic therapy, but monilial involvement is confined for the most part to the oral, rectal, or vaginal mucosa. Thrush, the commonest such complication, usually results from the use of antibiotic trochees. Another complication of great practical importance is the development of bacterial resistance. Penicillin resistance, which has appeared largely in the staphylococcic species, has also been noted in most enterococci and in many strains of Streptococcus viridans, especially those responsible for subacute bacterial endocarditis, but fortunately the hemolytic streptococcus, Treponema pallidum, gonococcus, meningococcus, and pneumococcus have retained their penicillin sensitivity. Resistance of the tubercle bacillus to streptomycin presents a major obstacle to the successful management of tuberculosis. Loss of sensitivity to the broad spectrum drugs, though not yet a serious problem, has been observed. Suppression of the penicillinase mechanism by these drugs, however, which restores the response to penicillin, may prove valuable in cases in which they have been used without success. Antibiotic antagonism is apparently rare in clinical practice, but the indiscriminate use of combined therapy should be avoided. Anorectal irritation and diarrhea often follow the use of the broad spectrum drugs, and a few cases of severe pseudomembranous enterocolitis have been reported in patients under treatment with chloretetracycline (Aureomycin) and chloramphenicol. A cholera-like syndrome of staphylococcic enteritis has been observed in some patients after the use of antibiotics, especially oxytetracycline (Terramycin). Unexplained fever associated with diarrhea in any patient receiving antibiotics should suggest the onset of this severe, sometimes fatal, complication. Immediate discontinuance of the agent being used and the institution of intensive supportive measures are essential if the patient is to recover. Elimination of staphylococci from the intestinal tract has been secured in some cases by the administration of erythromycin, the most effective chemotherapeutic agent now available for use in this emergency. Immediate anaphylactic shock following penicillin administration is being reported with greater frequency as more and more persons are becoming sensitive to penicillin. The reaction appears suddenly, and since death may result within minutes great caution should be used in prescribing penicillin for patients with an allergic background, in whom susceptibility is most likely to be encountered. The benefits of antibiotic therapy are so great that these drugs should not be withheld when they are definitely indicated, but they should never be applied indiscriminately.

* Medical Literature Abstracts, J.A.M.A., May 22, 1954, p. 413.

‡ By W. H. Harris, Jr., Virginia M. Monthly, 81:63-67 (Feb.) 1954.

Book Reviews

William H. Welch and the Rise of Modern Medicine, by Donald Fleming, A.B., A.M., Ph.D., Associate Professor of History at Brown University, Edited by Oscar Handlin, Little Brown and Company, Boston, Massachusetts, 1954. 216 pages. Price $3.00.

As a young novitiate in the healing art, this reviewer had the unusual good fortune of meeting Dr. William Henry Welch, who at that time was given an honorary degree at New York University. It was a stimulating connection with the past to have met one of the founders of Johns Hopkins. Thus the reading of this biography of Welch was more than just "The lives of great men all remind us . . ."; it was personal contact. The reading of biographies of great personages of medicine and dentistry to this reviewer's mind is one of the educational experiences that activates and enthuses the younger members of the profession. More of the profession of dentistry, both living and dead, deserve attention in this respect. Possibly some of our younger professional literati will undertake the challenge to present the lives of those in our profession who have influenced our progress so deeply.

William Henry Welch was born in 1850 and died in 1934 having truly spanned the most active period of medical growth in America. It was he who played a major role in the original planning and organization of Johns Hopkins to which he brought such men as Osler, Halstead and Mall and later Wilmer and Sigerist. To quote the book, "Of his own colleagues and students whom he launched on their careers—Welch rabbits—the best known included W. T. Councilman, chosen by Harvard to fill a post initially offered to Welch himself; Simon Flexner of the University of Pennsylvania and the Rockefeller Institute; Alexander C. Abbott of Pennsylvania; the Nobel prize winner George H. Whipple of California and Rochester; Milton C. Winternitz of Yale; Ernest Goodpasture of Washington University; Rufus Cole, Christian Herter, Eugene L. Opie, and Peyton Rous, all of the Rockerfeller Institute; with others like Mall, Gilchrist, Whitridge Williams, Cullen and MacCallum (who went for a time to the College of Physicians and Surgeons in New York, now truly a part of Columbia University) whom he kept at Johns Hopkins itself or brought back. In England his student G. H. F. Nuttall came by a round about process to be a professor in Cambridge University."

Welch also made a strong imprint on many outstanding agencies, now monumental in Health Service. Again we quote, "William Henry Welch had come by 1900 to fill the role of the leading Influential of American science in succession to Benjamin Franklin and the elder Benjamin Silliman of Yale—by far the greatest Influential that the biological sciences had yet known in America. Welch was president of the Association of American Physicians in 1901, president of the Board of Scientific Directors of the Rockefeller Institute from 1901 to 1933, president of the American Association for the Advancement of Science in 1906, chairman of the Executive Committee of the Carnegie Institution of Washington from 1909 to 1916, president of the American Medical Association in 1910 to 1911, president of the National Academy of Sciences from 1913 to 1916, and Chairman of the Advisory Council of the Milbank Memorial Fund from 1922 to 1932. The list is not exhaustive but representative."

On his 80th birthday in 1930, President Hoover called Welch "our greatest statesman in the field of public health."

Those who read this book will obtain the feeling of contact with a great man, his teachers—Cohnheim, Klebs, Ludwig, von Recklinghausen, Hoppe-Seyler, Waldeyer, His, Delafield and others, a veritable Hall of Fame—and his contemporaries—Osler, Walter Reed, Wilmer, Whipple, Gorgas, Lewellys F. Barker, Halsted, Kelly, Hurd, and Howell—most of whose names will already have been familiar. This experience will be one of the vacations of flight into fact instead of fiction, that we should take frequently to spark our endeavors.

SAMUEL CHARLES MILLER

Mayo Clinic Diet Manual by The Committee on Dietetics of the Mayo Clinic, Second Edition, W. B. Saunders Company, Philadelphia, 1954, $5.50.

With so many of our population overweight, this manual compiled primarily for physicians and dietitians, can be of great use to professionals and the lay public. Dentists who have patients under the care of physicians for diabetes, gastric or doudenal ulcers or any of the other diseases with special dietary problems, which may complicate a dental-nutritional program, will find in this manual much information of help in the dental-medical treatment of these patients.

The manual was first published in 1949 and this is the first revision. The authors have included the latest information on foods, vitamins and current dietary practices at the Mayo Clinic. Other revisions will be necessary in the future because our knowledge

of nutrition develops continuously as does our knowledge of disease. In the next few years the dietary recommendations of today will be out of date.

There are dietary programs for gastric and duodenal ulcers, for diseases of the gall bladder, for diseases of the liver, for operations on the intestinal tract, for chronic ulcerative colitis, for sprue, for allegies, for urinary calculi, for diabetes, for gout, for obesity and for pregnancy. Also are included dietary programs for infants, for renal diseases of children and for celiacs and epileptics.

The information in this manual is practical and well organized. It contains an excellent index. The manual is recommended for the dentist and will serve as an excellent guide in the handling of dietary programs.

IRVING YUDKOFF

Through Alaska's Back Door by Bernard Francis Ederer, D.D.S., Vantage Press, Inc. New York; 1954; 158 pp.; 21 illustrations; $3.00.

Many of us spend the better part of our lives dreaming adventurous dreams. Normally, the sedentary life the dentist lives is not conducive to hunting tigers in Africa, climbing mountains in Switzerland, or exploring islands in the South Pacific. One of our colleagues, however, has done more than day-dream. B. F. Ederer, D.D.S., a graduate of Creighton University, had a vision of entering Alaska through, as he puts it, "the back door." With a companion and a sturdy canoe he started from Edmonton, followed the MacKenzie River system to Aklavik, a Hudson's Bay outpost, then by traversing treacherous rapids and icy mountain streams, he reached Alaska; facing death, illness, and mishaps of one kind or another. He reached the Yukon River, on to Dawson City, the fabulous Klondike, Skagway, and finally, Juneau.

He tells the story of his travels with complete simplicity, underplaying a role which must have called for the ultimate in courage and determination.

For those who favor the spirit of adventure, a vicarious satisfaction will result from making this journey with Dr. Ederer.

ALLAN N. ARVINS

Your Wonderful Teeth by G. Warren Schloat, Jr., with photographs by the author, Charles Scribner's Sons, New York; April, 1954; 48 pp.; $2.25.

Here is a grand little book for patient education for the youngsters. The author, an artist and expert photographer, offers an illustrated presentation of what the child may expect from his dentist. It graphically illustrates the importance of sound healthy, teeth, proper oral hygiene, and the need for dental care.

Much of the imagined fear connected with dental practice will be easily dispelled once the young patient reads this book or has it read to him.

Some clever drawings depicting oral bacilli as gremlin-like creatures are used to explain the caries process. Any dentist whose practice includes the young patient should have this excellent work in his reception room.

ALLAN N. ARVINS

Experimental Hypnosis, edited by Leslie M. Le Cron, The Macmillan Co., New York, 1952, 483 pages, $6.00.

This book is a clinical symposium on experimental hypnosis. The author, a practicing psychologist, has gathered together a group of previously published papers on hypnosis and has presented them so that any dentist or physician interested in the subject will be able to obtain a good background. Each article is preceded by an editor's note of several pages, that ties it in with the preceeding one.

The use of hypnosis in dentistry is well covered by two men, Aaron A. Moss and Thomas O. Burgess. The former is a dentist. The article is a summary of his book *Hypnosis in Dentistry.* Dr. Burgess is the head of the Department of Psychology, Concordia College, Moorhead, Minnesota. Both men stress the fact that any dentist wishing to use hypnosis as an adjunct to his other medicaments, armentarium and techniques, (hypnosis in dentistry seems to have so many roles), must have training and a complete understanding of the limitations.

Post hypnotic suggestion is covered fully in Dr. Burgess' paper. He discussed the many successes that dentistry has had with elimination of habits, getting patients to wear prosthetic and orthodontic appliances, and getting patients to relax in the dental chair. Granting the success, issue might be taken with all the dentists that have employed post hypnotic suggestion. Why does the patient have the habit? Why can't the patient wear the appliance? Why was the patient fearful in the first place? What is the etiology of the particular problem that post hypnotic suggestion is to get rid of? Might it not be better to first discover the etiology before going ahead with the hypnosis? By removing the habit, an outlet for an emotional problem might be destroyed and at the same time a psychosomatic problem might be initiated.

In the introduction, Dr. Le Cron discusses the need for a greater knowledge of the physiology and psychology of hypnosis. This book to a great extent helps fulfill that need. This work is truly a giant stride in helping the dental and medical professions to better understand hypnosis.

NATHAN WACHTEL.

Current Therapy, 1954 ed. by Howard F. Conn, M.D. W. B. Saunders Co., Philadelphia & London, 898 pages.

The sixth annual edition of Current Therapy clearly describes many authoritative methods for the treatment of disease. The concise and accurate articles

makes the desired information sufficiently detailed and readily available.

All chapters are written by physicians actively engaged in the treatment of the respective diseases. In addition there are descriptions of the more recent advances in treatment, together with time-tested therapeutic agents. In Current Therapy the prime objective is to give the physician the properly evaluated methods for treatment.

These annual revisions permit publication of results following the use of new therapeutic agents. Also included are the resultant toxic, or side effects and the precautions to be observed. Of particular interest to the dentist are sections 7, devoted to the endocrine system; section 11, which evaluates diseases of the skin; and section 15 which comprises a complete description of burns and their treatment.

The concluding part of the text is devoted to a discussion of poisons and their effective antidotes, together with voluminous charts, listing the principal toxic ingredients in the various commercial products.

Although Current Therapy has been published primarily with the physicians' needs in mind, it can be recommended as a worthwhile addition to the dental library.

MARVIN N. OKUN

Science and Man's Behavior, The Contribution of Phylobiology by Trigant Burrow, M.D., edited by William E. Galt, Ph.D., Philosophical Library, New York, 1953.

Psychoanalysis had its inception in a social and intellectual climate that stresses individualism in human behavior and mechanistic interpretation in the biological sciences. Dr. Burrow was dissatisfied with both these disciplines. He approached it from an organismic frame of reference. He studied the emergent properties of the group and the intricate modes of interfunction of the individuals in the groups. Disorders in behavior thus appear social or interrelational demanding observation and study in their dynamic group setting. The greatest emphasis is given to resolving man's behavioral conflict. Man is in urgent need of adopting an objective inclusive attitude in respect to behavior disorders both individual and social. The group analytic studies evolved in this book develop the scientific principles underlying the neuroses of man.

I. NEWTON KUGELMASS, M.D.

Know Your Doctor, by Leo Smoiler, M.D., with Neil Morgan, Little, Brown & Company, Boston, 1954.

This book is concerned with attitudes of patients to their illnesses, and of doctors to their patients. Writing in the layman's language, Dr. Smoiler uses fascinating case histories to cover a variety of subjects—anemia, heart trouble, constipation, asthma, stomach ulcers, "sick" headaches. In each case, he demonstrates how the patient's mind was, in one way or another, at the root of his ailment. As a practical introduction to "psychosomatic medicine," and as an exposure of the genteel frauds practiced by a few physicians who are certainly not representative of the profession, **Know Your Doctor** serves both to amuse and inform. The book somehow gives a distorted view of the practice of medicine. In the long run it does more harm than good in the hands of the laity whose judgment lacks the foundations of medical principles in everyday practice.

I. NEWTON KUGELMASS, M.D.

Music Therapy, by Edward Podolsky, M.D., Philosophical Library, New York, 1954.

Music has been a means of healing the mind from ancient times. It was found to have a favorable influence on the fertility of women and the mental aberrations of man. The physiological and psychological effects of music place it in the therapeutic armamentarium of most mental and emotional illnesses. Experts in the field present their views on the effect of music on body and mind, especially in rehabilitation of the mentally ill. There are chapters on the role of music in anxiety, anger, depression, fatigue, psychosomatic and psychopathic disorders. Although an extracurricular therapeutic adjuvant, music will play an ever increasing role in psychotherapy.

I. NEWTON KUGELMASS, M.D.

Academy Proceedings

MID-WINTER MEETING OF THE AMERICAN ACADEMY OF DENTAL MEDICINE

The American Academy of Dental Medicine will hold its annual Mid-Winter Meeting and Luncheon at the Hotel Statler in New York City, on Sunday, December 5th, 1954. There will be a business meeting for members at 10 A.M. followed by a luncheon. The afternoon will be devoted to a discussion on "Bone." The panel will be composed of both physicians and dentists. All members, interested dentists and physicians are cordially invited. The essayists for the afternoon will be:

HARRY SICHER, M.D.
Topic: Bone Formation and Resorption.

J. P. WEINMANN, M.D.
Topic: Variations in the Structure of Bone Tissue and Their Significance in Radiology.

LESTER CAHN, D.D.S.
Topic: The Correlation Between Clinical, Roentgenologic and Histologic Studies in Bone Lesions.

DR. NORMAN E. ALDERMAN, *Chairman*
30 East 60th Street
New York 22, N. Y.

NEW YORK SECTION MEETING

The April meeting of the New York Section was held at the Hotel New Yorker on April 22, 1954. President-elect George F. Clarke of Boston presenterd plaques to Past Presidents Harry Roth, Alonzo DeVanna, Ruth Aaron, George Witkin and outgoing President Harold E. Brennan for meritorious service to the New York Section.

The speaker of the evening, Dominick DiMaio, M.D., Director of the Pathology Department of the New York Polyclinic Medical School and Hospital, spoke on the "Pathological Correlation of Periodontal Disease." Dr. DiMaio's paper was very well received by one of the largest turnouts in recent years. The discussion was well illustrated with Kodachrome slides of photomicrographs and clinical cases presenting the mechanism of inflammation and connective tissue changes during periodontal disease.

Elections were held and the following officers will serve for the coming year: President—Abraham Reiner, President-elect—Leon Scott, Secy.-treas.—Theodore Lite, Editor—Sanford Kirsch, Delegate—Reuben Fogelson, Trustees—Harold Brennan, Norman Alderman and Melvin Pomeranz.

NEW STAFF APPOINTMENTS FOR ACADEMY MEMBERS

Congratulations to two Academy Founders, Milton Hollins and Jules N. Obin on their recent promotion to the rank of Assistant Professor of Periodontia at New York University College of Dentistry.

The New Jersey Section can be proud of Samuel Turkenkopf who has recently been promoted to the rank of Associate in Oral Medicine at the University of Pennsylvania School of Dentistry. Dr. Turkenkopf is engaged in both teaching and research at the Dental College.

J. Robert Theaman, a newly elected member to the Academy, and Jack L. Thaller, whose application to the Academy is now pending, have been appointed to the Periodontia Staff at New York University College of Dentistry.

CONSTITUTION CHANGES APPROVED AT EIGHTH ANNUAL MEETING IN PHILADELPHIA

Article I—Section 3—Add "Or Semi-Annual"
4—Add "Or Semi-Annual"

Article VI—Section 18—Add "Or Semi-Annual"
19—Add (2nd line) "Or Semi-Annual"
Delete (3rd line) "Or Honorary Membership"
Add (4th line) "A certificate of Honorary Membership may be conferred at the Annual or Semi-Annual Meeting following his election."

Article VII—Section 20—Add "Or Semi-Annual"
22—Add "Or Semi-Annual"
23—Add "Or for non-payment of dues for a period of two years. (see Article XI, Section 68)"

Article XI—Section 48b—Add "Or Semi-Annual"
48c—Add "Or Semi-Annual"
56a—(new section)—*Planning Committee* shall consist of the President, President Elect and the Past Presidents. They shall make plans for the advancement of the Academy and act as an advisory committee to the President, and shall submit a report of its activities to the Board of Trustees.

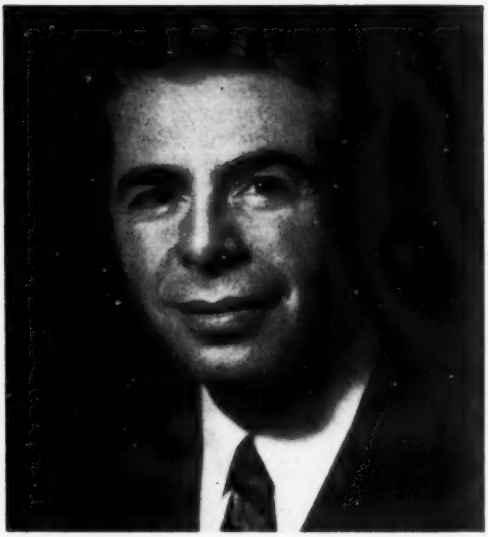
Article X—Section 59—Add (line 2) "May or"
63—Change to read "The Board of Trustees shall meet immediately preceding the Semi-Annual Meeting and immediately preceding and immediately following the Annual Meeting."

Article XI—Section 68 (Paragraph 3)—Add "Failure to pay dues for two years shall constitute an automatic suspension"
76—Add "Or Semi-Annual"
77—Add "The Program and Clinic Committee shall compile from the membership of the Academy a list of Essayists and Clinicians in the various specialties of Dentistry and Medicine, distribute such information to the Sections and recommend to the Sections the names of an Essayist or Clinician when a Section applies to the National Body Body for an Essayist or a Clinician."
78—Add "Semi-Annual"

LOUIS R. BURMAN, New York
FRANK L. BURNS, Montreal
FRANK H. SCHAMBACH, Newark
WALTER I. LEVINE, Baltimore, *Chairman*

DR. SAMUEL CHARLES MILLER IS RECIPIENT OF TUFTS COLLEGE DENTAL SCHOOL AWARD FOR LEADERSHIP IN PERIODONTOLOGY

Dr. Samuel Charles Miller, Professor of Periodontia and Chairman of the Periodontia Department of New York University College of Dentistry, was awarded "The Tufts College Dental School Award For Leadership in Periodontology" on June 20th, 1954 at the Fifth Annual Berkshire Conference held at the Cape Codder Hotel, Falmouth, Mass.



More than 100 people watched Dr. C. D. Marshall-Day, Dean, Tufts College Dental School present the award to Dr. Miller. Previous recipients of this award have been Dr. Clarence Vaughan, Dr. Olin Kirkland, Dr. Harold Leonard, and Dr. Arthur Merritt. The award is presented by the Tufts College Dental School at the Annual Berkshire Conference in Periodontology and Oral Pathology.

The award is in the form of a diploma and has the following inscription:

TUFTS COLLEGE DENTAL SCHOOL

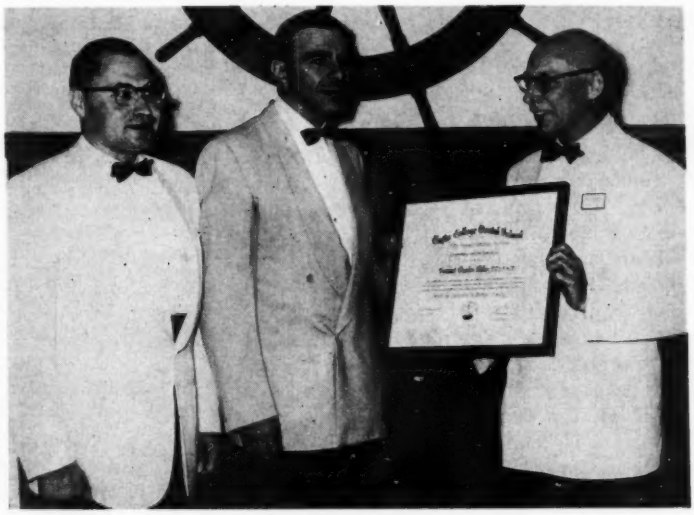
FIFTH ANNUAL BERKSHIRE CONFERENCE

in

PERIODONTOLOGY AND ORAL PATHOLOGY

SAMUEL CHARLES MILLER, D.D.S., F.A.C.D.

In recognition of a distinguished career as a teacher of Periodontology, and in tribute to your lifelong devotion in a pioneering effort to make the benefits of the science of Periodontology available for the service of mankind, Tufts College Dental School is pleased to confer upon you this Award for Leadership in Periodontology.



Dean Cyril D. Marshall-Day (right) of Tufts College Dental School presents Dr. Samuel Charles Miller with the "Fifth Annual Award for Leadership in Periodontology" as Dr. Irving Glickman, Director of the Fifth Annual Berkshire Conference looks on. The presentation took place on Sunday evening, June 20th, 1954 at the Cape Codder Hotel, Falmouth, Mass.

NEW MEMBERS ELECTED AT PHILADELPHIA, PA. — MAY 15th, 1954

BARKLEY, JOSEPH A.
Detroit, Michigan

BENTZ, RENE AUGUSTO PUIG
Ciudad Trujillo, R. D.

BERGER, JOHN
Brooklyn 11, N. Y.

CALDARONE, CHARLES V.
Providence, R. I.

CANNISTRACI, ANDREW
Bronx 60, N. Y.

CORWIN, BERNARD B.
Brooklyn 17, N. Y.

EPSTEIN, WALTER N.
St. Louis, Missouri

FEUER, SAMUEL
Schenectady, N. Y.

FREEDMAN, GERSON A.
Baltimore 15, Md.

FREIMUTH, EDWARD G.
Detroit, Michigan

GALIN, NATHAN I.
Medina, Ohio

HARVEY, ROBERT F.
Montreal, Canada

HOFFMAN, ELMER N.
Baltimore 2, Md.

KAPLAN, SAUL S.
Philadelphia 2, Pa.

LEUIN, IRVING S.
Pitsburgh, Pa.

MANN, JULIUS
Paterson, N. J.

MORAY, JEROME I.
Newark, N. J.

NIDITCH, SAMUEL B.
Brooklyn, N. Y.

OLIVER, HOWARD T.
Montreal, Canada

RICHARDS, A. J., JR.
Detroit 26, Michigan

ROBIN, GILBERT N.
Pittsburgh, Pa.

ROSS, H. JUSTIN
New York, N. Y.

RUIZ, ANTONIO
Laredo Tamps, Mexico

SCHWARTZ, LOUIS
Flushing, N. Y.

SHAW, SYDELL
New York, N. Y.

SIMMONS, HERBRET B.
Detroit, Michigan

SIMON, MURRAY L.
Toronto, Canada

SORREL, JEROME M.
New York 23, N. Y.

TEMKIN, ABRAHAM
Torrington, Conn.

THEAMAN, J. ROBERT
New York, N. Y.

VEASEY, EUGENE E.
Wilmington, Delaware

WEISS, AARON
Far Rockaway, N. Y.

WIEBUSCH, F. B.
New York, N. Y.

HONORARY MEMBERS ELECTED MAY 15th, 1954

DR. GERALD D. TIMMONS
Philadelphia, Pa.

DR. LESTER W. BURKET
Philadelphia, Pa.

HONORARY MEMBERSHIP AWARDED TO DEANS TIMMONS AND BURKET

One of the highlights of the Eighth Annual Meeting of the American Academy of Dental Medicine was the presentation of honorary membership in the Academy to Dr. Gerald D. Timmons, Dean, Temple University School of Dentistry, and Dr. Lester W. Burket, Dean, University of Pennsylvania School of Dentistry.

Dean Gerald D. Timmons accepts the honorary membership plaque from the late President Alvin H. Berman.

Dean Timmons was associated with Indiana University College of Dentistry from 1925 to 1940. In 1942 he became Dean of Temple University College of Dentistry and has held that position ever since. He is a member of Omicron Kappa Upsilon and the American College of Dentists in addition to local and national dental groups. He is a Past President of the Indianapolis Dental Society and a Past Trustee of the Indiana State Dental Association and the American Dental Association of Dental Schools. At present he is a member of a Council on Dental Education of the American Dental Association and a member of the Board of Regents of the American College of Dentists. Dr. Timmons has been active in fraternity affairs and is a Past Supreme Grand Master of Delta Sigma Delta Fraternity.

Honorary membership in the Academy is presented to Dean Lester W. Burket by the late President Alvin H. Berman.

Dr. Burket rose through the ranks of the Oral Medicine Department at the University of Pennsylvania to become Professor in 1946. He also held the rank of Professor of Oral Medicine at the Graduate School of Medicine. In 1951 he became Dean of the School of Dentistry of the University of Pennsylvania. He is the author of the text "Oral Medicine," now in its second edition.

Dr. Burket is Chief of Oral Medicine at the Philadelphia General Hospital and is Consultant to the Army, Navy and Veteran's Administration. He is a member of numerous dental societies and has contributed over seventy articles to the dental literature.

The American Academy of Dental Medicine is proud that these two distinguished deans have joined our ranks.

ALVIN H. BERMAN

It is with deep regret that we announce the passing of the immediate Past President of the Academy, Dr. Alvin H. Berman, on May 17, 1954. The sudden passing of Dr. Berman came as a great shock to all, and especially to those who were with him just one day before at the final session of the Eighth Annual Convention in Philadelphia at which he presided. The Academy has lost a hard working, enthusiastic, and loyal friend.

Alvin H. Berman graduated from the Baltimore College of Dental Surgery in 1921 and immediately become active in dentistry and dental affairs. He became the National President of Alpha Omega Fraternity in 1926, and from 1930 to 1940 he was an Instructor in Anatomy at the University of Maryland Dental School. Dr. Berman was very active in hospital work and was Attending Surgeon, Associate Chief of Dentistry, and Chief of the Outpatient Department at Sinai Hospital in Baltimore. He was a member of the American Dental Association and the Maryland Dental Association. In 1950 he was a member of the Hospital Service Committee of the Maryland Dental Association.

Dr. Berman served the Academy for many years, as treasurer, as President-elect, and finally as President. He attended to the affairs of his administration with a vigor and diligence that few men demonstrated. In his Retiring President's Message, which appears on the first few pages of this issue, one can easily see the devotion and love this man had for the Academy. His loss leaves a void in the ranks of the Academy and organized dentistry.

The Academy membership extends its sincerest condolences to his family.

DAVID BECKER

Dr. David Becker, President of the New Jersey Section of the American Academy of Dental Medicine passed away on May 6th, 1954. He was 54 years of age. Dr. Becker received his undergraduate training at Norwich University and Columbia University and in 1923 obtained his Doctor of Dental Surgery degree from the University of Pennsylvania.

He was an active member of the Periodontia Staff at New York University College of Dentistry, and had been a member of the Essex County Isolation Hospital and the Beth Israel Hospital. A member of the American Dental Association, David Becker was also active in the Essex County Dental Society and the Academy of Medicine of Northern New Jersey.

At the Eighth Annual Meeting of the American Academy of Dental Medicine the following resolution was passed:

Be it resolved that:

The American Academy of Dental Medicine expresses the deepest feeling of loss at the sudden passing of Dr. David Becker, President of the New Jersey Section. Modest, self effacing, never seeking the limelight, David Becker was behind the scenes of some of the most successful functions of the Academy. His earnestness and intensity and ability in the service of the profession as a practitioner, as a teacher, and as a research worker have long been evaluated and appreciated by those who knew him. Dr. Becker's professional interests and dignity did not keep him from enjoying and partaking in good humor and good fellowship.

Be it further resolved that a copy of this resolution be printed in the next edition of the Journal and a copy of said resolution be forwarded to the family of our beloved colleague and member.

Announcements

POSTGRADUATE TRAINING IN PERIODONTIA AND ORAL MEDICINE NEW YORK UNIVERSITY COLLEGE OF DENTISTRY

The Periodontia Department of New York University College of Dentistry which has been giving postgraduate courses in this subject since 1926, announces its full time course in Periodontia and Oral Medicine for one academic year, September 20, 1954 to May 26, 1955, leading to a certificate. Two year full time, four year half time courses and two year half-time courses are also given.

A ten session (one evening weekly) introductory course begins Oct. 6th, 1954. All courses are under the direct supervision of Dr. Samuel Charles Miller.

A two week full time course in the Spanish language and a half-year course in the Spanish language are also available beginning January 10th, 1955.

For information concerning the above or courses in other phases of dentistry write to Secretary, Postgraduate Division, New York University College of Dentistry, 209 East 23rd Street, New York 10, N. Y.

TUFTS COLLEGE DENTAL SCHOOL

The following courses listed below will be presented at Tufts College Dental School during 1954. Application and further information may be obtained by writing the Director, Division of Graduate and Postgraduate Studies, Tufts College Dental School, 136 Harrison Avenue, Boston 11, Mass.

DPG-711—Full Denture Implants, every Wednesday as listed. September 15, 22, 1954, October 13, 20, 27, 1954. Tuition $200.00. Dr. Norman I. Goldberg and Dr. Aaron Gershkoff.

DPG 602—Participation Course in Periodontology. Monday through Friday for one week from October 18-22, 1954. Tuition $150.00. Class limited to 12. Dr. Irving Glickman & Staff.

DPG 201—Oral Pathology for the Oral Surgeon. Each Thursday afternoon for 8 weeks from October 7 through Dec. 2, 1954. 1-5 p.m. Tuition $150.00. Class limited to 10. Dr. Irving Glickman, Dr. Irving Meyer, Dr. Gerald Shklar.

DPG 601—Special Participation Course in Periodontology. 8 Mondays on the following dates, Nov. 22, 29, 1954, Jan. 3, 10, 17, 24, 31, Feb. 7, 1955. Tuition $200.00. Class limited to 12. Dr. Irving Glickman & Staff.

Postgraduate Course in Oral Prosthesis. September 17, 1954 to June 7, 1955. Tuition $900.00, and for 18 month course leading to a Masters degree—$1,600.00. Dr. Irving Hardy.

DPG. 301—Minor Oral Surgery. Each Wednesday for eight weeks from Oct. 13 to Dec. 1, 1954. Tuition $125.00. Class limited to fifteen. Dr. Daniel J. Holland & Staff.

DPG. 302— General Anesthesia. Each Wednesday for eight weeks from Dec. 15, 1954 to Feb. 16, 1955. Tuition $150. Class limited to fifteen. Dr. Daniel J. Holland & Staff.

THE AMERICAN INSTITUTE OF DENTAL MEDICINE

The next Annual Meeting of the Institute will take place at the Desert Inn, Palm Springs, California, October 31 to November 4, 1954. The faculty will consist of: William A. Albrecht, Ph.D., University of Missouri, Columbia, Missouri; Charles H. Best, M.D., D.Sc., University of Toronto, Toronto, Canada; Gordon M. Fitzgerald, D.D.S., University of California, San Francisco; Maynard K. Hine, D.D.S., Indiana University, Indianapolis, Indiana; Ernest Jawetz, Ph.D., M.D., University of California, San Francisco; and Joseph P. Weinmann, M.D., University of Illinois, Chicago, Illinois.

All Seminar lectures will participate in a round table forum concerning the application of their subject to the practice of Dental Medicine. Applications and full information may be secured from the Executive Secretary, Miss Marion G. Lewis, 2240 Channing Way, Berkeley 4, California.

BETH ISRAEL HOSPITAL, BOSTON, MASS.

The Teaching Division of the Dental Department of the Beth Israel Hospital announces a two week conference and seminar in Periodontology from Sept. 13 to the 24th, 1954. The course is under the direction of Dr. Henry M. Goldman and staff.

The objective of this seminar is to present to the practitioner all of the techniques employed in periodontal therapy as well as theoretical background. It will include etiology, diagnosis and treatment of various diseases of the supporting tissues of the teeth. Periodontal pocket therapy as well as an over-all mouth rehabilitation program will be stressed. Local environmental factors and systemic influences in periodontal therapy will be discussed. The material will be presented by lectures, demonstrations and clinics. The fee for the course is $350.00.

For further information, write to Coordinator of Education Programs, Beth Israel Hospital, 330 Brookline Avenue, Boston, Mass.

THE AMERICAN INSTITUTE OF DENTAL MEDICINE

CASE HISTORY SERVICE

The Institute is issuing again for the year 1953-54, under an educational extension division, Case Histories from the broad field of Dental Medicine. These will be accompanied by original 35 mm. kodachrome slides of the oral condition, pertinent laboratory findings, medical background, roentgenograms, histologic slides, photomicrographs and whatever may be indicated in each individual case.

This monthly service started January 1953 and has met with unprecedented success. Any member of the A.D.A. or A.M.A., or their foreign equivalent, is eligible to apply.

Anyone subscribing to this Case History Service is entitled to full membership in the American Institute of Dental Medicine for the fiscal year. There are still available a few case histories for the year 1952-53. Further information may be obtained from the Executive Secretary, Miss Marion G. Lewis, 2240 Channing Way, Berkeley 4, California.

ESTABLISHMENT OF THE UNITED STATES ARPA

(Association for Paradentosis Research)

At a regular meeting of the California Academy of Periodontology, the Academy accepted the official invitation of the International ARPA (Association for Paradentosis Research) to become a member organization in the United States, to be known as the United States ARPA. The presiding officer of the Academy will automatically be the President of this national organization. The names of the present officers for the year 1954 are: Dr. Samuel Bleadon, President; Dr. R. Thomas Dunkin, Vice President; Dr. Howard J. Mallon, Recording Secretary; Dr. Elmer G. Smith, Financial Secretary; Dr. Clarence E. Butler, Treasurer.

A quarterly journal which carries articles in various languages and which includes after each one a summary in English, is published in Geneva and is available to each member at a cost of $3.00 annually.

At the present time the International ARPA includes organizations in Switzerland, France, Denmark, Germany, England, Italy, Spain, Chile, Argentina, Peru, Brazil, Uruguay, Hungary, Austria, Czechoslovakia, Holland and Norway.

The next Congress of the International ARPA will take place in Venice September 6 to 12, 1955. A Program Committee for this Congress has been appointed with Dr. Hermann Becks, San Francisco, as Chairman. The function of this committee is to select clinicians and essayists from the ranks of the United States ARPA and also from the dental profession of the United States at large. Anyone interested in participating in lecture presentations or clinics at the Venice Congress is requested to write to Dr. Hermann Becks, the George Williams Hooper Foundation for Medical Research, Medical Center, University of California, San Francisco 22, California.

AMERICAN ACADEMY OF IMPLANT DENTURES

The next meeting of the American Academy of Implant Dentures will be held at the Biltmore Terrace Hotel, Miami Beach, Florida, November 6th and 7th, 1954.

Reservations can be made until October 6th, through Convention Chairman Dr. Wm. E. Barb, 668 E. Maple Road, Indianapolis, Indiana.

Application for membership will be received until October 6th, through Secretary Admissions Board, Dr. W. E. Pernell, P. O. Box 506, Chandler, Arizona.

ACADEMY OF ORAL REHABILITATION OF HANDICAPPED PERSONS

The Academy for Oral Rehabilitation of Handicapped Persons announces its 2nd Annual Meeting, to be held Friday, November 5th at the Shore Club Hotel, Miami Beach, Florida. The meeting will be devoted to the oral rehabilitation of all types of handicapped patients. A luncheon and business meeting will comprise the remainder of the one day session.

The entire program will be open to the public. Further details may be secured by writing to the Secretary, Dr. Hugh M. Kopel, 19933 Livernois Ave., Detroit 21, Michigan.

OHIO STATE UNIVERSITY

The College of Dentistry, Ohio State University, will present a series of post-graduate courses in dentistry during the months of September and October, 1954. These courses are given for five consecutive days each, Monday through Friday, and the enrollment is limited to approximately ten in each class so that intimate teaching is possible.

An innovation this year will be a three-day course in new advances in restorative dentistry. This course will immediately follow the five day courses available from Septemper 20 to 24, and be presented on September 25, 26, and 27. The fee for this ocurse will be $35.

The fee for each of the other courses is $50 with the exception of Oral Surgery for which a fee of $100 is charged.

Anatomy of the Head and Neck	Sept. 20-24	Dr. Linden F. Edwards
Clinical Oral Pathology and Diagnosis	Sept. 20-24	Dr. Hamilton B. G. Robinson
Oral Surgery	Sept. 20-24	Dr. Morgan L. Allison
Partial Denture Prosthesis	Sept. 20-24	Dr. Victor L. Steffel
Periodontics	Sept. 20-24	Dr. John R. Wilson
Basic Cephalometrics	Sept. 20, 21, 22	Orthodontic Staff
New Advances in Restorative Dentistry	Sept. 25, 26, 27	Drs. Lefkowitz, Postle, and Robinson and Mr. Phillips
General Anesthesia	Sept. 27-Oct. 1	Dr. Morgan L. Allison
Complete Denture Prosthodontics	Oct. 11-15	Dr. Carl O. Boucher

Further information and application may be secured from College of Dentistry, Ohio State University, Columbus, Ohio.

PHARMACEUTICAL COMMITTEE

The Pharmaceutical Committee is interested in clinically evaluating the use of non-toxic and possibly beneficial drugs. This project requires the cooperation of a limited number of members of our academy.

Any member interested in joining this project which will consist of utilizing certain of the newer drugs (non-harmful) in their dental practices, should contact the Pharmaceutical Committee.

Theodore Lite, *Chairman*
Pharmaceutical Committee
1426 Kings Highway
Brooklyn 29, New York

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